

THE HANDY ENCYCLOPEDIA OF USEFUL INFORMATION

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✓ *Useful*
Information

EDITED BY
LEWIS COPELAND

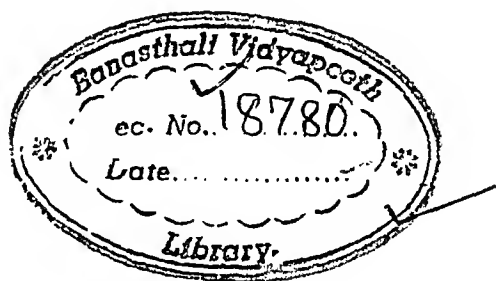
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INTRODUCTION

AN OUTSTANDING FACT of modern life is the increasing need of specific knowledge of all kinds. In nearly every home there is a frequent quest for authoritative information that will dispose of a moot point seen in the press, heard on the radio, or discussed among the members of the family. Even more constant is the need for practical information essential in the running of the home and in the understanding of the business world. For these purposes many reference works are available. But they are voluminous and costly, or they are too highly specialized. It is to meet this need for a compact and inexpensive volume that *The Handy Encyclopedia of Useful Information* has been prepared.

The plan of this book has been to classify all related information into nine major sections. They are: The Nation, The World, The Home, Business, Literature and Language, The Arts, The Sciences, Sports and Games, Miscellaneous Information. A glance at the Table of Contents and the Index (at the end of the book) will reveal the wealth of facts, figures and methods that this reference work makes available to the modern reader.

Every effort has been made to include the very latest information and to check all facts and figures as to their accuracy and authenticity. In the accomplishment of this aim the editor wishes to acknowledge his thanks to his associates for their splendid co-operation.

L. C.

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THE NATION

THE UNITED STATES OF AMERICA

Population: (1940 census) 131,669,275.

Area: 3,022,387.

Capital: Washington, District of Columbia.

States: New England States—Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island; Middle Atlantic States—New York, New Jersey, Pennsylvania, Maryland, Delaware, Virginia, West Virginia; Southern States—North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Louisiana, Arkansas, Texas, Oklahoma; Central States—Michigan, Wisconsin, Illinois, Indiana, Ohio, Kentucky, Minnesota, Iowa, North Dakota, South Dakota, Nebraska, Kansas, Missouri; Northwestern States—Wyoming, Montana, Idaho, Washington, Oregon; Southwestern States—New Mexico, Colorado, Utah, Arizona, Nevada, California. There are 48 States in the Union.

Leading Cities: New York City, Chicago, Philadelphia, Detroit, Los Angeles, Cleveland, Baltimore, St. Louis, Boston, Pittsburgh, Washington, D.C., San Francisco, Milwaukee, Buffalo, New Orleans, Minneapolis, Cincinnati, Newark, Kansas City, Indianapolis, Houston.

Geographic Features: Occupying the southern portion of North America, the United States extends from the Pacific Ocean in the west to the Atlantic Ocean in the east, and is

bounded on the north by Canada and on the south by Mexico and the Gulf of Mexico. The Rocky Mountains in the west contain numerous lofty ranges including the Sierra Nevada in California, where Mount Whitney (the highest peak in the nation) rises 14,495 feet; the Cascade, extending north into Oregon; the Teton in Wyoming; the Bitter Root in northern Idaho; and the San Juan in Colorado. Among the principal ranges of the Appalachian Mountains in the east are the White in New Hampshire; the Adirondacks and Catskills in New York; the Allegheny, extending from Virginia into Pennsylvania; and the Blue Ridge in Virginia and North Carolina, containing Mount Mitchell (6,684 feet in height), the highest elevation in the east. The longest rivers are the Mississippi, which rises in Minnesota and flows south to the Gulf of Mexico; the Missouri, originating in Montana and joining the Mississippi north of St. Louis; the Colorado, emptying into the Gulf of California; the Rio Grande, which has its source in Colorado and separates Texas from Mexico; the Arkansas, flowing into the Mississippi north of Louisiana; the Ohio, rising in Pennsylvania and forming the northern boundary of Kentucky; the Red, which originates in Texas and joins the Mississippi in Louisiana. The largest lakes are Superior, Michigan, Huron, Erie, and Ontario in the northeast—all except

Lake Michigan lying between the United States and Canada—and Great Salt Lake in northern Utah. Other notable geographic features include the Grand Canyon in Arizona, the Mojave Desert and Death Valley in California, the geysers and petrified forests of Yellowstone Park in Wyoming, Niagara Falls (167 feet in height) in western New York, Yosemite Valley in California, Mammoth Cave in Kentucky and Carlsbad Caverns in New Mexico, and Chesapeake Bay—the largest bay in the United States—extending north into Maryland.

Industries: The chief agricultural pursuits are the growing of wheat, oats, and other grains, cotton, tobacco, potatoes, corn, vegetables, fruit, sugar cane; and dairying and the raising of cattle, hogs, poultry, and sheep. Forests containing pine, cedar, maple, oak, and other trees provide lumber. The factories produce iron, steel, textiles, clothing, electrical apparatus, paper, munitions, shoes, motor vehicles, locomotives, chemicals, rubber, cigarettes and cigars, glass, furniture, and numerous other articles. Meat packing, baking, canning, printing and publishing, distilling, petroleum refining, and the production of motion pictures are of great importance. Among the principal minerals are coal, iron ore, oil, gold, silver, copper, mercury, lead, salt, marble, granite, zinc, gypsum.

Interesting Features: The Capitol, Washington National Monument, the Lincoln Memorial, and the Library of Congress in Washington, D.C.; the Statue of Liberty in New York Harbor, and the Empire State Building (1,250 feet high) in New York City; historic Independence Hall and the Liberty Bell in Philadelphia; many famous universities including Harvard, Yale, and Princeton; Golden Gate Bridge (4,200 feet in length) across San Francisco Bay in California; Boulder Dam (726 feet high), the highest dam

in the United States, on the Colorado River; numerous National Parks such as Yellowstone, Yosemite, and Hot Springs; the Museum of Science and Industry in Chicago; Mount Vernon and the tomb of George Washington in Maryland.

History: The United States was originally peopled by Indians, and was opened to European colonization by the first voyage of Columbus in 1492, and the later explorations of John Cabot and Jacques Cartier. The first permanent white settlement was founded at St. Augustine, Fla., by the Spaniards in 1565; the British established Jamestown, Va., in 1607, and the Dutch organized a colony (New Amsterdam) on Manhattan Island two years afterward. New England was settled largely by Puritans who had been driven from England by religious intolerance, and among them were the Pilgrims who founded Plymouth, Mass., in 1620.

Taking possession of Canada, the French also claimed the central region of the continent, calling the area Louisiana in honor of Louis XIV of France. The Dutch territory was seized by the Duke of York in 1664, and New Amsterdam became New York. The prolonged struggle between France and Great Britain for colonial domination culminated in the French and Indian War which began in 1755 and ended in 1763. Canada and all of Louisiana east of the Mississippi (except New Orleans) were taken by the British.

As a result of excessive taxation and other oppressive treatment the colonists decided to break away from Great Britain and began the Revolutionary War in 1774. George Washington was made commander-in-chief of the Continental Army, and in 1776 the Continental Congress adopted the Declaration of Independence. The British general, Cornwallis, was defeated at Yorktown by Washington—with the aid of

French forces—in 1781, and all land east of the Mississippi was surrendered to the United States.

In 1787 the Constitution was drawn up in Philadelphia. George Washington was elected the first President of the nation. The western boundary of the United States was extended to the Rocky Mountains by the purchase of Louisiana from Napoleon in 1803 (for 15 million dollars), and in 1804—following the Lewis and Clark expedition—the Oregon region in the Northwest was claimed by Congress.

War was again declared against Great Britain in 1812; two years later British forces burned Washington, D.C., but were eventually defeated. Texas gained its independence from Mexico in 1836, and was admitted to the Union in 1845. The northeastern boundary between the United States and Canada was determined by a treaty in 1842; the northwestern boundary was settled in 1846. President James K. Polk sent an army led by Zachary Taylor to invade Mexico, General Winfield Scott captured Mexico City in 1846, and two years later the United States took possession of New Mexico and California. A great gold rush resulted from the discovery of gold in California in 1848; Utah was settled by the Mormons in 1851.

Abraham Lincoln was elected President in 1860 on a platform which opposed any further extension of Negro slavery to the new territories, and the southern states seceded from the Union, forming a Confederacy with Jefferson Davis as President. The Civil War followed between the North and the South, ending in 1865 with the surrender of General Robert E. Lee, commander of the Confederate forces, to General Ulysses S. Grant. President Lincoln was assassinated in the same year. The Reconstruction period was marked by disputes over the disposition and rule of the South, and recovery from the effects of the war was slow.

Alaska was purchased from Russia in 1868. Western migration led to the building of a great railway system across the continent, and the last half of the 19th century saw the development of great steel, oil, and railroad corporations. In Nevada the discovery of silver greatly increased settlement in that territory. After the American battleship Maine was blown up in Havana harbor in 1898, the United States declared war on Spain. The peace treaty (signed in the same year) ceded Puerto Rico, Guam, and the Philippines to the United States, which had annexed the Hawaiian Islands during the progress of the war.

The era between the Spanish-American War and the First World War, which began in 1914, was marked by problems in regard to the stabilization of the newly acquired states and colonies. After German submarines had sunk numerous ships—including the *Lusitania* in 1915—causing the loss of many American lives, Congress in 1917 declared war on Germany at the request of President Woodrow Wilson. In collaboration with the French, United States troops halted the German offensive at Chateau-Thierry, forced the enemy to retreat across the Marne River, and began the great final assault which culminated in the defeat of Germany in 1918.

A period of widespread unemployment followed the war, but the United States reached the height of its prosperity during the administration of Calvin Coolidge. In 1930 a severe business depression began. Succeeding President Herbert Hoover in 1932, Franklin D. Roosevelt attempted various methods of aiding economic recovery, including the National Recovery Act which the Supreme Court declared unconstitutional in 1935.

The Selective Service and Training Act was passed in 1940; two years after the German invasion of Austria and Czechoslovakia. In 1941 Pearl Harbor

in the Hawaiian Islands and the Philippines were simultaneously attacked by Japan. On the following day (December 8) the United States declared war against the Japanese, and on December 11 against Germany and Italy. The European phase of the war

came to an end with the surrender of the Germans to the forces of the United States, Great Britain, and the Soviet Union on May 8, 1945. The war in the Pacific was officially concluded with the Japanese surrender on September 2, 1945.

THE STATES OF THE UNION

Alabama

Origin of Name: From Alibama, a Musshogean tribe of Indians.

Entered Union, 1819.

Population: 2,832,961; rank 17th.

Area: 51,609 square miles; rank 28th.

Capital: Montgomery.

Leading Cities: Birmingham, Montgomery, Mobile, Gadsden, Tuscaloosa.

State Flower: Goldenrod.

Motto: We Dare Defend Our Rights.

Known as Cotton State.

Representatives in U.S. House, 9.

Geographic Features: Cheaha Mountain, Cumberland plateau, Muscle Shoals (part of Tennessee River in the north), Mobile River in the south, Clear Creek Falls, Alabama River formed by the Tallapoosa and Coosa above Montgomery.

Industries: Agriculture, mainly cotton, peanuts, corn; potatoes, oats, tobacco, sugar; manufacturing, mainly cotton goods, cottonseed oil, iron, and steel. Nitrates, coal, iron ore are mined.

Other Facts: Settled by the French in 1699, later acquired by the British and Spanish, becoming an American colony in 1783. A provisional congress at Montgomery voted the Confederate States into existence in 1861.

Interesting Features include Gulf State Park on the Gulf of Mexico, an

18 mile azalea trail at Mobile, Cheaha State Park (highest point in the state, 2,407 feet), University of Alabama.

Arizona

Origin of Name: From Arizona, an Indian name, or Arida-Zona, a Spanish name meaning "dry area."

Entered Union, 1912.

Population: 499,261; rank 44th.

Area: 113,909 square miles; rank 5th.

Capital: Phoenix.

Leading Cities: Phoenix, Tucson.

State Flower: Saguaro Cactus.

Motto: Ditat Deus (God Enriches).

Known as Baby State.

Representatives in U.S. House, 2.

Geographic Features: Grand Canyon, Colorado River flowing through the Canyon in the north, Salt River Valley; northern plateau is from 4,000 to 7,000 feet in altitude, southern plateau reaches an altitude of 2,500 feet; forests of petrified pine and cedar cover many acres.

Industries: Agriculture, mainly cotton, sub-tropical fruits, corn, wheat, barley, oats, potatoes; manufacturing, mainly articles for tourist trade, rugs, pottery, baskets, blankets; silver, lead, zinc, gold, copper, asbestos are mined.

Other Facts: Originally belonged to Mexico and was ceded to the United

States in 1848 as part of New Mexico, but became a separate state in 1863.

Interesting Features include Boulder Dam, Roosevelt Dam, Montezuma Castle (an ancient cliff dwelling), Grand Canyon National Park, University of Arizona at Tucson, Lowell Observatory at Flagstaff.

Arkansas

Origin of Name: Algonkin name of the Quapaw Indians.

Entered Union, 1836.

Population: 1,949,387; rank 24th.

Area: 53,102 square miles; rank 26th.

Capital: Little Rock.

Leading Cities: Little Rock, Fort Smith, Pine Bluff, North Little Rock.

State Flower: Apple Blossom.

Motto: Regnat Populus (The People Rule).

Known as Wonder State.

Representatives in U.S. House, 7.

Geographic Features: Mostly level save for the Ozark Mountains in the west; Mississippi River forms the entire eastern boundary; 47 hot springs, Silver Falls in the Ozarks.

Industries: Agriculture, mainly cotton, corn, oats, wheat, potatoes, fruit; manufacturing, mainly cotton goods, petroleum refining. Minerals produced include most of the bauxite in the country, as well as coal, lead, manganese, petroleum, whetstones.

Other Facts: First settled in 1800; an Act of Congress in 1832 set aside the hot springs and surrounding region for the disposal of the United States.

Interesting Features are the Hot Springs National Park southwest of Little Rock, Silver Falls, University of Arkansas at Fayetteville.

California

Origin of Name: Named after an imaginary Spanish island, or from "Aixó es calor de forni de fornia,"

an expression used by the Catalan explorers.

Entered Union, 1850.

Population: 6,907,387; rank 5th.

Area: 158,693 square miles; rank 2nd.

Capital: Sacramento.

Leading Cities: Los Angeles, San Francisco, Oakland, San Diego, Long Beach, Sacramento, Berkeley, Glendale, Pasadena.

State Flower: Golden Poppy.

Motto: Eureka (I Have Found It).

Known as Golden State.

Representatives in U.S. House, 23.

Geographic Features: Two mountain ranges, Sierra Nevada (a section of the Cascade Mountains) and Coast Range; 12 mountains over 14,000 feet high, including Mount Whitney, loftiest peak in the United States, and Mount Shasta. The two most important rivers are the San Joaquin and Sacramento, both emptying into San Francisco Bay. Many giant redwood groves, Yosemite Valley, Death Valley—lowest region in the United States, Catalina Island, Lake Tulainyo (highest lake in the U.S.).

Industries: Agriculture, mainly citrus fruit, plums, grapes, wheat, sugar beets, cotton; manufacturing, mainly petroleum refining, meat-packing, ship-building. Petroleum, natural gas, copper, gold, borax, mercury are mined. The motion-picture industry, centered in Hollywood.

Other Facts: Acquired from Mexican control in 1846; gold was discovered in 1848, followed by a remarkable gold rush in 1849.

Interesting Features include Golden Gate Bridge, Hollywood, Sequoia National Park, Lick Observatory, Yosemite National Park, General Grant National Park, University of California at Berkeley.

Colorado

Origin of Name: From a Spanish word meaning red.

Entered Union, 1876.

Population: 1,123,296; rank 33rd.

Area: 104,247 square miles; rank 7th.

Capital: Denver.

Leading Cities: Denver, Pueblo, Colorado Springs, Greeley.

State Flower: Columbine.

Motto: Nil Sine Numine (Nothing Without God).

Known as Centennial State.

Representatives in U.S. House, 4.

Geographic Features: Located on the western rim of the Mississippi basin and in east central portion of the Rocky Mountains, many peaks rising to a height of over 14,000 feet. Largest river is the Colorado, flowing southwest; notable gorges are Royal Gorge or Canyon of the Arkansas, Grand River Canyon, and Toietic Gorge; 14 national forests cover 13,500,000 acres.

Industries: Agriculture, mainly sugar beets, cantaloupes, wheat, corn, barley; stock-raising, bee-keeping, dairying. Manufacturing, mainly petroleum refining, beet sugar production, meat-packing, copper smelting. Minerals include helium, gold, silver, lead, zinc, copper.

Other Facts: The section east of the Rocky Mountains was included in the Louisiana Purchase in 1803. Actual settlement began in 1858 when gold was discovered, and the Territory of Colorado was organized in 1861.

Interesting Features are Rocky Mountain National Park, Mesa Verde National Park, the highest suspension bridge in the world (1,053 feet above the Arkansas River), Mount Evans Highway, highest automobile road in the world, Colorado State University in Denver.

Connecticut

Origin of Name: From Quonecktaut, an Indian name.

Entered Union, 1788.

Population: 1,709,242; rank 31st.

Area: 5,009 square miles; rank 46th.

Capital: Hartford.

Leading Cities: Hartford, New Haven, Bridgeport, Waterbury, New Britain, Stamford, Norwalk, Meriden.

State Flower: Mountain Laurel.

Motto: Qui Transtulit Sustinet (He Who Transplanted Still Sustains).

Known as Nutmeg State, or Constitution State.

Representatives in U.S. House, 6.

Geographic Features: A broad central valley with highlands in the east and west; dense forests cover more than half the state's area. The most important river, the Connecticut, is joined above Hartford by the Farmington and flows through the central part of the state into Long Island Sound; the largest lake is Candlewood in the west.

Industries: Agriculture, mainly poultry raising, fruit, tobacco, truck crops, potatoes; manufacturing, mainly firearms, machine tools, silverware, cutlery, clocks, textiles, sewing machines, airplane motors.

Other Facts: First permanent settlement was made by the English in 1636; their "Fundamental Orders," adopted in 1639, was the first written constitution of a self-governing people.

Interesting Features include Yale University in New Haven, Charter Oak in Hartford, many parks, and ocean beaches for recreation.

Delaware

Origin of Name: In honor of Lord De La Warr.

Entered Union, 1787.

Population: 266,505; rank 47th.

Area: 2,057 square miles; rank 47th.

Capital: Dover.

Leading Cities: Wilmington, Dover.

State Flower: Peach Blossom.

Motto: Liberty and Independence.

Known as Diamond State.

Representatives in U.S. House, 1.

Geographic Features: Land is low-lying, flat, and sandy with many

swamps and 50 fresh water lakes; Delaware River separates the extreme northern part of the state from New Jersey; other rivers are Mispillion Creek in the south, and Smyrna River in the north central section.

Industries: Agriculture, mainly peaches, strawberries, wheat, corn; fishing fleets take much herring, shad, rockfish, and sturgeon. Manufactured are chemicals, leather goods, ships, machinery, paper; kaolin clay is an important quarry industry.

Other Facts: First occupied by the Dutch in 1631, later by Sweden and Great Britain; Delaware was the first state to ratify the U.S. Constitution—in 1787.

Interesting Features include the Delaware Breakwater, which is at Cape Henlopen and was over 40 years in construction at a cost of \$2,125,000; duPont Boulevard extending from Wilmington to Lewes, historic Old Swedes Church in Wilmington, and University of Delaware in Newark.

District of Columbia

Origin of Name: An adaptation of "Columbus."

Population: 663,091; rank 37th.

Area: 69 square miles; rank 49th. Co-extensive with the city of Washington, capital of the United States.

Official Flower: American Beauty Rose.

Motto: Justitia Omnibus (Justice to All).

Geographic Features: Located in the west central part of Maryland on the Potomac River.

Industries: Activity is mainly governmental; manufactured are beverages, bread, ornamental ironwork; meat is packed. Potomac River is used for commercial navigation.

Other Facts: The French engineer L'Enfant was assigned by George Washington to design the city. The entire district is governed by Congress.

Interesting Features include the Capitol building, where the Senate and House of Representatives meet in legislative session; the White House, home of the President of the United States; Washington Monument, Lincoln Memorial, Library of Congress, Ford's Theater where Lincoln was assassinated, Rock Creek Park, Thomas Jefferson Memorial, Army Medical Museum, George Washington University, Smithsonian Institution.

Florida

Origin of Name: From Pascua Florida, a Spanish name for Feast of Flowers.

Entered Union, 1845.

Population: 1,897,414; rank 27th.

Area: 58,560 square miles; rank 21st.

Capital: Tallahassee.

Leading Cities: Jacksonville, Miami, Tampa, St. Petersburg, Pensacola, Orlando, West Palm Beach.

State Flower: Orange Blossom.

Motto: In God We Trust.

Known as Peninsula State.

Representatives in U.S. House, 6.

Geographic Features: Of coral formation with no mountains of great height, the state has vast acres of pine forest; in the south are great swamps, the Everglades, and Lake Okeechobee—largest lake in Florida. The most important river is St. John's (350 miles long) in the northeast section, flowing north; Kissimmee River in the south enters Lake Okeechobee from Kissimmee Lake.

Industries: Agriculture, mainly citrus fruit, tobacco, rice, oats, maize, peas; manufacturing, mainly lumber with by-products of rosin, tar, turpentine; bread, malt liquors, meat-packing. Land fertilizer is made from phosphate rock; lime, kaolin, stone, fuller's earth are produced.

Other Facts: First settled in 1559 by Spaniards; St. Augustine, oldest city of

European origin in the nation, was founded in 1565.

Interesting Features include the National Park in the Everglades, a 123-mile highway from Key West (most southern point of the United States) to the mainland, Marine Studios at Marineland, Fort Marion, Fort Matanzas, Fort Jefferson, University of Florida at Gainesville, Silver Springs near Ocala, Wakulla Springs near Tallahassee.

Georgia

Origin of Name: In honor of King George II of England.

Entered Union, 1788.

Population: 3,123,723; rank 14th.

Area: 58,876 square miles; rank 20th.

Capital: Atlanta.

Leading Cities: Atlanta, Savannah, Augusta, Macon, Columbus.

State Flower: Cherokee Rose.

Motto: Wisdom, Justice, Moderation.

Known as Cracker State.

Representatives in U.S. House, 10.

Geographic Features: Blue Ridge Mountains in the north, with several peaks over 3,000 feet high; 23,800,000 acres of forest; the Savannah is the most important river, forming the greater part of the eastern boundary extending northeast from Savannah. The southern part of the state contains swamplands, notably the large Okefinokee Swamp.

Industries: Agriculture, mainly cotton, tobacco, peanuts, rice, potatoes, corn, sugar cane syrup; many swine and cattle are raised. Manufactured are textiles, flour, furniture, tile and pottery, brass, steel, turpentine and rosin, lumber. Minerals produced include clay, marble, granite, fuller's earth, barites, limestone, coal, iron, bauxite, manganese, gold, and silver.

Other Facts: Georgia was settled by English colonists in 1733, and was one of the thirteen original states. Ratifying

the Confederate Constitution in 1861, it was the scene of much fighting during the Civil War and was readmitted to the Union in 1870.

Interesting Features include Warm Springs (a sanitarium for infantile paralysis patients), seven National Parks and 21 State parks, Fort Pulaski at the mouth of the Savannah River, the Georgia School of Technology in Atlanta, University of Georgia at Athens.

Idaho

Origin of Name: From Edah hoe, an Indian name.

Entered Union, 1890.

Population: 524,873; rank 43rd.

Area: 83,557 square miles; rank 12th.

Capital: Boise.

Leading Cities: Boise, Pocatello, Idaho Falls, Nampa.

State Flower: Syringa.

Motto: Esto Perpetua (It Is Perpetuated, or It Is Forever).

Known as Gem of the Mountain State.

Representatives in U.S. House, 2.

Geographic Features: Lofty mountain ranges include Coeur d'Alene, Cabinet, Bitter Root, and Beaverhead in the north; Lost Rivers and Sawtooth in the central portion, and the Blackfoot, Bear, and Snake River mountains in the southeast. Most important river is the Snake which forms part of the western boundary and flows north through Hell's Canyon—a gorge averaging 5,510 feet in depth. Shoshone Falls is 46 feet higher than Niagara; the largest lakes are Coeur d'Alene, Pend Oreille, and Kaniksu in the north.

Industries: Agriculture, mainly wheat, oats, barley, beans, potatoes, sugar beets, peas, prunes, apples; field and garden seed raising, sheep raising. Manufactured are lumber, dairy products, beet sugar, flour; minerals produced include lead, silver, and gold.

Other Facts: First settled in 1842, Idaho was the scene of a gold rush in 1860; Idaho Territory was organized in 1863 out of sections of Nebraska, Washington, and North Dakota.

Interesting Features include numerous mountain streams and rivers which afford good cold-water fishing; many species of big game sought by hunters; reservations containing 4,000 Indians; Twin Falls, Shoshone Falls which is illuminated at night, the University of Idaho in Moscow, and picturesque canyons.

Illinois

Origin of Name: From Iliniwek, an Indian name.

Entered Union, 1818.

Population: 7,897,241; rank 3rd.

Area: 56,400 square miles; rank 23rd.

Capital: Springfield.

Leading Cities: Chicago, Peoria, Rockford, East St. Louis, Springfield.

State Flower: Violet.

Motto: National Union and State Sovereignty.

Known as Sucker State.

Representatives in U.S. House, 26.

Geographic Features: Almost entirely level; only 10 per cent of the state is forested. Illinois River flows southwest, from the northeast part, into the Mississippi which forms the entire west boundary; the Kaskaskia River joins the Mississippi in the south.

Industries: Agriculture, mainly wheat, corn, oats, rye, barley, potatoes, soy beans; sheep are raised for wool. Manufacturing centers contain steel mills, meat-packing plants, foundries, petroleum refineries, automobile plants, railroad-car building and repair shops, clothing houses, printing and publishing companies. Minerals produced are coal, fluorspar, petroleum, iron, zinc.

Other Facts: Illinois was settled in 1818; Springfield became the capital in 1837 mainly through the efforts of Abraham Lincoln.

Interesting Features include the Chicago Drainage Canal, Field Museum in Chicago, Apple River Canyon, Cave-in-Rock on the Ohio River, the Lincoln tomb and monument near Springfield; State parks include White Pines, Starved Rock, Pere Marquette, and Giant City.

Indiana

Origin of Name: Named after the Indians.

Entered Union, 1816.

Population: 3,427,796; rank 12th.

Area: 36,291 square miles; rank 37th.

Capital: Indianapolis.

Leading Cities: Indianapolis, Fort Wayne, Gary, South Bend, Evansville, Terre Haute, East Chicago.

State Flower: Zinnia.

Motto: The Crossroads of America.

Known as Hoosier State.

Representatives in U.S. House, 11.

Geographic Features: Generally level except in the south, with numerous small lakes including Winona, Manitou, and Wawasee; Lake Michigan and the Ohio River are the north and south boundaries respectively, while the Wabash River forms nearly half the western boundary. The West Fork River crosses the state in the north and flows southwest; the southern part of Indiana is a limestone area with many sinkholes and caverns.

Industries: Agriculture, mainly corn, tomatoes, wheat and other grains, tobacco, soy beans; stock raising, vegetable canning, and the production of peppermint and spearmint oil. In the manufacturing centers are iron and steel works, oil refineries, foundries and machine shops, meat-packing plants, furniture factories. Mined are coal, coke, petroleum, gypsum, pig iron.

Other Facts: Established about 1732, Vincennes was the first permanent settlement in the state. The seat of government was moved from Corydon to Indianapolis in 1825.

Interesting Features include Wyandotte Cave, second largest in the nation; George Rogers Clark Memorial in Vincennes, Cataract Falls, the site of Abraham Lincoln's childhood home in Spencer County, Purdue University at Lafayette, many scenic State parks such as Brown County, Indiana Dunes, Clifty Falls, McCormick's Creek.

Iowa

Origin of Name: From the Ioways or Alauas, a Sioux tribe of Indians.

Entered Union, 1846.

Population: 2,538,268; rank 20th.

Area: 56,280 square miles; rank 24th.

Capital: Des Moines.

Leading Cities: Des Moines, Sioux City, Davenport, Cedar Rapids, Waterloo, Dubuque, Council Bluffs.

State Flower: Wild Rose.

Motto: Our Liberties We Prize and Our Rights We Will Maintain.

Known as Hawkeye State.

Representatives in U.S. House, 8.

Geographic Features: The land is mainly rolling prairie, the highest altitude being 1,670 feet; Iowa lies between the Mississippi and Missouri rivers, the Des Moines River flowing southeast through the state into the Mississippi.

Industries: Agriculture, mainly corn, butter, oats, fruit, eggs, nuts, timothy seed; manufacturing, mainly farm implements, washing machines, cosmetics, railroad equipment, fountain pens; there are numerous meat-packing plants, canneries, and creameries. Minerals produced include coal, stone, clay, gypsum.

Other Facts: The first settlement in the state was made by Julien Dubuque in 1788; the territory was included in the Louisiana Purchase in 1803, becoming successively a part of Louisiana, Missouri, Michigan, and Wisconsin until its separation from the latter in 1838.

Interesting Features include summer resorts at Spirit Lake, Clear Lake; of scenic interest is West Okoboji Lake between wooded hills; Iowa State University at Iowa City, Buena Vista College at Storm Lake.

Kansas

Origin of Name: From the name of a Sioux tribe of Indians.

Entered Union, 1861.

Population: 1,801,028; rank 29th.

Area: 82,276 square miles; rank 13th.

Capital: Topeka.

Leading Cities: Kansas City, Wichita, Topeka, Hutchinson.

State Flower: Sunflower.

Motto: Ad Astra Per Aspera (To the Stars Through Difficulties).

Known as Sunflower State.

Representatives in U.S. House, 6.

Geographic Features: In almost the exact center of the nation, the state is mainly flat except for hills in the west rising to a height of 4,000 feet above sea level. The Missouri River forms one third of the eastern boundary, while the Arkansas and Kansas Rivers flow east and southeast. There are over 42 lakes—none of notable size; in the northwest the state is drained by the Beaver River.

Industries: Agriculture, mainly wheat, potatoes, corn, flax, poultry raising, dairying. Wichita is the largest broom corn market in the world, and Kansas is the foremost flour milling state in the nation. In the manufacturing centers are meat-packing plants, feed mills, and oil refineries. Natural gas, coal, oil, zinc, salt, cement, and lead are produced.

Other Facts: Explored first by Spaniards, the territory was claimed by the French and ceded to Spain in 1763, but was regained by France in 1800 and sold to the United States three years later.

Interesting Features include historic forts at Leavenworth, Scott, and Riley,

University of Kansas at Lawrence, frequent tornadoes, School for the Blind at Kansas City.

Kentucky

Origin of Name: From the Wyandot Indian name, Ken-tah-ten.

Entered Union, 1792.

Population: 2,845,267; rank 16th.

Area: 40,395 square miles; rank 36th.

Capital: Frankfort.

Leading Cities: Louisville, Covington, Lexington, Padueah, Newport.

State Flower: Goldenrod.

Motto: United We Stand, Divided We Fall.

Known as Blue Grass State.

Representatives in U.S. House, 9.

Geographic Features: The Ohio River forms the north boundary of the state, which rises in the southeast to more than 2,000 feet in altitude (Cumberland Mountains); the western boundary is formed by the Mississippi. The Cumberland River rises in the east and flows south through Poor Fork Valley, and the Tennessee River also follows a southward course.

Industries: Agriculture, mainly corn, wheat, oats, potatoes, tobacco, flax, cotton, fruit; horses, swine, cattle, and sheep are raised. Manufactured are chewing and smoking tobacco, lumber, cotton goods, oil products, iron and steel; there are many railroad construction and repair shops, foundries, meat-packing plants, machine shops. Minerals produced include coal, petroleum, fluorspar, natural gas, limestone.

Other Facts: The first settlement was at Harrodsburg in 1774; the territory was originally a section of Fincaastle County, Virginia, and was organized as Kentucky County in 1776.

Interesting Features include Mammoth Cave, Colossal Cave, Sinking Creek, Abraham Lincoln National Park, Monte Casino Roman Catholic

Church (smallest church in the world, seating but three persons) at Covington, the University of Kentucky at Lexington.

Louisiana

Origin of Name: In honor of King Louis XIV of France.

Entered Union, 1812.

Population: 2,363,880; rank 21st.

Area: 48,523 square miles; rank 30th.

Capital: Baton Rouge.

Leading Cities: New Orleans, Shreveport, Baton Rouge, Monroe, Alexandria.

State Flower: Magnolia.

Motto: Union, Justice, Confidence.

Known as Pelican State, or Creole State.

Representatives in U.S. House, 8.

Geographic Features: Much of the state is low-lying and flat, with no important hills. The Sabine River forms the western boundary, while the Mississippi bounds the northeast section and flows, joined by the Red River, through the southeast part into the Gulf of Mexico. In the south are many large bayous. Of the numerous lakes, Pontchartrain is the largest; others are Grand and Calcasieu.

Industries: Agriculture, mainly sugar cane, rice, corn, sweet potatoes, pecans, citrus fruit, cotton; manufacturing, mainly oil and sugar refining, lumber and cottonseed products, fish canning. More furs (mink, muskrat, raccoon, opossum) are produced than in any other state; oysters and shrimp are caught commercially. The output of sulphur, salt, natural gas and petroleum is large.

Other Facts: Discovered by the Spanish explorer Narvaez, Louisiana was governed by France until 1769, and by Spain until 1803, when the French regained the territory and sold it to the United States.

Interesting Features include the State Museum in New Orleans, the

New Orleans Mardi Gras held annually, the yearly Spring Fiesta and Flower Show at New Orleans, Louisiana State University at Baton Rouge.

Maine

Origin of Name: From the province Maine in France.

Entered Union, 1820.

Population: 847,226; rank 35th.

Area: 33,215 square miles; rank 38th.

Capital: Augusta.

Leading Cities: Portland, Lewiston, Bangor, Auburn.

State Flower: Pine Cone.

Motto: Dirigo (I Direct).

Known as Pine Tree State.

Representatives in U.S. House, 3.

Geographic Features: Largely covered with dense forests, the state contains lofty mountains (highest is Mount Katahdin, 5,273 feet) in the northwest, more than 2,000 lakes of glacial origin—the largest being Moosehead Lake, and 1,300 islands; Penobscot River in the northeast flows south into Penobscot Bay, and in the southwest is the Kennebec River.

Industries: Agriculture, mainly potatoes, oats, hay, apples, buckwheat, blueberries, poultry raising; fishing is a prominent industry. Manufacturing, mainly paper, lumber, boots and shoes, cotton and woolen goods, machinery, vegetable canning; much granite is quarried.

Other Facts: Maine was first settled in 1607 by English colonists at the mouth of the Kennebec River, and contained the first chartered town (Georgeanna, now known as York) in America.

Interesting Features include Acadia National Park on Mount Desert Island, an 84,000 acre sanctuary for wild animals and birds; Baxter State Park in Augusta, a Swedish colony (established in 1875) in Aroostook County, University of Maine at Orono.

Maryland

Origin of Name: In honor of Queen Henrietta Maria of England.

Entered Union, 1788.

Population: 1,821,244; rank 28th.

Area: 10,577 square miles; rank 41st.

Capital: Annapolis.

Leading Cities: Baltimore, Cumberland, Hagerstown, Frederick.

State Flower: Blackeyed Susan.

Motto: Fatti Maschii Parole Femine (Manly Deeds and Womanly Words).

Known as Free State.

Representatives in U.S. House, 6.

Geographic Features: Almost divided in half by Chesapeake Bay (an arm of the Atlantic Ocean), the state is low and flat in the east but mountainous in the west; Great Backbone Mountain rises to a height of 3,340 feet. The Potomac River forms the southwestern boundary, while west and east of the bay are the Youghiogony and Choptank Rivers respectively. Gunpowder Falls is in the north central portion, and Crystal Grottoes at Boonesboro are noted scenic caverns.

Industries: Agriculture, mainly tobacco, corn, wheat, potatoes, hay; more tomatoes are packed than in any other state in the nation. The manufacturing centers contain iron and steel works, meat-packing plants, oil and copper refineries, locomotive factories, machine shops; pig iron, asbestos, clay, coal, and coke are produced.

Other Facts: The first settlement was made at St. Mary's by English colonists in 1634, when the original charter for Maryland was given to Lord Baltimore. The colony (one of the historic thirteen) was a prominent naval center during the Revolutionary War; Antietam Battlefield, near Hagerstown, was the site of an important battle during the Civil War.

Interesting Features include Fort McHenry National Park bordering

Baltimore's waterfront, the United States Naval Academy at Annapolis, Crystal Grottoes containing remarkably clear stalactites, Johns Hopkins University, and the University of Maryland in Baltimore.

Massachusetts

Origin of Name: From Massadchu-es-et, an Indian name.

Entered Union, 1788.

Population: 4,316,721; rank 8th.

Area: 8,257 square miles; rank 44th.

Capital: Boston.

Leading Cities: Boston, Worcester, Springfield, Fall River, Cambridge, New Bedford, Somerville, Lowell, Lynn, Lawrence.

State Flower: Mayflower.

Motto: Ense Petit Placidam Sub Libertate Quietem (By the Sword We Seek Peace, But Peace Only Under Liberty).

Known as Bay State, or Old Colony State.

Representatives in U.S. House, 14.

Geographic Features: The highest portion of the state contains the Berkshire Mountains in the west, rising to a height of 3,500 feet. Most important river is the Connecticut in the west, flowing south through the state. Off the southeast coast are two large islands, Martha's Vineyard and Nantucket. Cape Cod (in the east below Boston) is a famous peninsula.

Industries: Agriculture, mainly hay, potatoes, tobacco, wheat, corn, rye, oats, maple sugar, apples, cranberries. Manufactured are cotton, woolen, and worsted goods, shoes and boots, paper, machinery, electric equipment, rubber, plastics; there are numerous printing and publishing companies. Minerals produced are mainly granite and marble.

Other Facts: The first settlement was made by the Pilgrims at Plymouth in 1620. Prominent in the Revolutionary War and one of the original thirteen colonies, Massachusetts was the

scene of the Battle of Bunker Hill, the Boston Tea Party, the ride of Paul Revere, and other historic events. New Bedford was the largest port for the whaling industry when the latter was at its height.

Interesting Features include Harvard University in Cambridge, Bunker Hill Monument in Boston, large public beaches at Nantasket, Salisbury, and Revere, Plymouth Rock, 24 state-owned forests developed for summer recreation.

Michigan

Origin of Name: From Michigama, an Indian name.

Entered Union, 1873.

Population: 5,256,106; rank 8th.

Area: 58,216 square miles; rank 22nd.

Capital: Lansing.

Leading Cities: Detroit, Grand Rapids, Flint, Saginaw, Lansing, Pontiac, Dearborn, Kalamazoo.

State Flower: Apple Blossom.

Motto: Si Quaeris Peninsulam Amoenam Circumspice (If You Seek a Pleasant Peninsula, Look About You).

Known as Wolverine State.

Representatives in U.S. House, 17.

Geographic Features: Divided by Lake Michigan into two sections, the state consists of two peninsulas—one in the north having Lake Superior as its northern boundary, and another in the south lying between Lake Michigan in the west and Lake Huron, Ontario, Canada, and Lake Erie in the east. Important rivers include the Muskegon and Escambia in the north, and the Grand in the south. Saginaw Bay penetrates deeply into the west side of the south peninsula; about 200 islands lie within the boundaries.

Industries: Agriculture, mainly oats, wheat, corn, potatoes, clover seed, sugar beets, beans, fruit; manufacturing, mainly automobiles, foundry and machine shop products, furniture,

cement, chemicals, farm implements, paper, and wood pulp. The principal minerals are salt, coal, iron ore, gypsum, natural gas, silver, copper, petroleum; 16 fish hatcheries are maintained.

Other Facts: First settled in 1650 by the French, Michigan remained under the control of France until 1763 when it was taken by the British, passing into American hands after the Revolutionary War.

Interesting Features include a national park on Isle Royale in Lake Superior, the University of Michigan at Ann Arbor, Mount Clemens—a mineral springs resort near Detroit, picturesque Mackinac Island near the strait between Lake Michigan and Lake Huron.

Minnesota

Origin of Name: A Sioux Indian name.

Entered Union, 1858.

Population: 2,792,300; rank 18th.

Area: 84,068 square miles; rank 11th.

Capital: St. Paul.

Leading Cities: Minneapolis, St. Paul, Duluth, Rochester.

State Flower: Lady Slipper or Moccasin Flower.

Motto: L'Etoile du Nord (The Star of the North).

Known as North Star State.

Representatives in U.S. House, 9.

Geographic Features: The Mississippi River has its headwaters in the northeast, flowing west and south to form the southeast border of the state; the Red River also has its origin in the north, while in the south is the Minnesota River. The Misquah hills in Cook County rise to a height of 1,630 feet above Lake Superior, which is part of the state's eastern boundary. There are more than 11,000 lakes, including Upper and Lower Red Lake in the north.

Industries: Agriculture, mainly

wheat, corn, butter, barley, potatoes, oats, rye, flour; manufacturing, mainly lumber, meat-packing, farm machinery, motor vehicles, bakery and candy products, iron, steel. Of all the iron ore in the nation, Minnesota produces 60 per cent; manganese is also mined.

Other Facts: Originally settled in the 17th century by French explorers, Minnesota later was under British control until after the War of 1812, and was organized as an American territory in 1849.

Interesting Features include Itasca State Park containing the source of the Mississippi, Superior National Forest, Pipestone National Monument (containing the Great Stone Face) in the southwest, Minnehaha Falls in Minnehaha Park, Minneapolis; the University of Minnesota in Minneapolis.

Mississippi

Origin of Name: From Maes-sipu, an Algonquin Indian name.

Entered Union, 1817.

Population: 2,183,276; rank 23rd.

Area: 47,716 square miles; rank 31st.

Capital: Jackson.

Leading Cities: Jackson, Meridian, Vicksburg, Hattiesburg.

State Flower: Magnolia.

Motto: Virtute et Armis (By Valor and Arms).

Known as Magnolia State.

Representatives in U.S. House, 7.

Geographic Features: The state is hilly but contains no mountains of great altitude; into the Mississippi River, which forms the western boundary, flow the Black and Yazoo Rivers; the Pearl and Tombigbee Rivers enter the Gulf of Mexico in the south. High bluffs overlook lower parts of the Mississippi.

Industries: Agriculture, mainly cotton, sweet potatoes, pecans, rice, corn, wheat, sugar cane, peanuts, fruit; oyster and shrimp fisheries are numerous. Factories produce cotton goods,

lumber, cottonseed oil. Important minerals in the state include coal, hydrated limestone, clay, gypsum.

Other Facts: The first settlement was made by the French on the present sites of Biloxi and Natchez; the territory was obtained by the British in 1763 and by the United States in 1798 when it became Mississippi Territory.

Interesting Features include the largest cotton plantation in the world (35,000 acres) at Scott, the annual Delta Staple Cotton Festival in Clarksburg, the Vicksburg National Military Park, the Iberville Memorial Bridge at Biloxi Bay, the public recreation center converted from a Civil War fort on Ship Island, the University of Mississippi at Oxford.

Missouri

Origin of Name: From the name of a Sioux Indian tribe.

Entered Union, 1821.

Population: 3,784,664; rank 10th.

Area: 69,674 square miles; rank 18th.

Capital: Jefferson City.

Leading Cities: St. Louis, Kansas City, St. Joseph, Springfield, Joplin, University City.

State Flower: Hawthorn.

Motto: Salus Populi Suprema Lex Esto (Let the Welfare of the People Be the Supreme Law).

Known as Show Me State.

Representatives in U.S. House, 13.

Geographic Features: The highest elevation (Ozark Mountains) is in the southwestern and south central parts of the state, while in the southeast the land is low-lying. Forming the eastern boundary, the Mississippi River is joined by the Missouri River—which flows southeast across the state—above St. Louis. Important lakes include Lake Taneycomo and Lake of the Ozarks.

Industries: Agriculture, mainly corn, oats, wheat, tobacco, potatoes, cotton; manufacturing, mainly flour and feed,

butter, cheese, machinery, corn cob pipes. The Kansas City packing plants and stockyards are well known. Minerals produced are coal, lead, pig iron, zinc, copper, barite, limestone, sandstone, marble, granite.

Other Facts: First explored by La Salle in 1682, Missouri was included in the Louisiana Purchase in 1803.

Interesting Features include the Bagnell Dam across the Osage River in the Ozark Mountains, the William Rockhill Nelson Gallery of Art and Atkins Museum in Kansas City, the boyhood home of Mark Twain in Hannibal, numerous Indian mounds and earthworks, 25 State parks, the University of Missouri in Columbia.

Montana

Origin of Name: The Spanish word for mountains.

Entered Union, 1889.

Population: 559,456; rank 40th.

Area: 147,138 square miles; rank 3rd.

Capital: Helena.

Leading Cities: Butte, Great Falls, Billings, Missoula, Helena.

State Flower: Bitterroot.

Motto: Oro y Plata (Gold and Silver).

Known as Treasure State.

Representatives in U.S. House, 2.

Geographic Features: The Rocky Mountains cross the western part of the state, which slopes toward the east into plains and valleys. The west slope of the mountains is drained by the Clark River system; highest peak is Granite Peak (12,850 feet) in the southwest corner. The state is drained almost entirely by the Missouri River system.

Industries: Agriculture, mainly wheat, flaxseed, oats, corn, rye, barley, sugar beets, potatoes; sheep are raised for wool. Manufacturing sections contain lumber and flour mills, petroleum refineries, copper smelters, creameries. Among the minerals produced are

gold, silver, lead, copper, petroleum, zinc, coal, manganese, asbestos, natural gas.

Other Facts: First explored by Chevalier De La Verendrye, Montana was a French possession until bought by the United States as part of the Louisiana Purchase in 1803. Gold was discovered in 1850 and drew numerous settlers from the east; war with the Indians resulted in the massacre of General Custer and his army by the Sioux in 1876.

Interesting Features include Glacier National Park on the border between the state and Canada, seven Indian reservations, University of Montana at Missoula, Lewis and Clark Cavern—a national monument.

Nebraska

Origin of Name: From an Omaha Indian name.

Entered Union, 1867.

Population: 1,315,834; rank 32nd.

Area: 77,237 square miles; rank 14th.

Capital: Lincoln.

Leading Cities: Omaha, Lincoln, Grand Island, Hastings.

State Flower: Goldenrod.

Motto: Equality Before the Law.

Known as the Tree Planter's State.

Representatives in U.S. House, 4.

Geographic Features: The foothills of the Rocky Mountains in the west rise to a height of 5,300 feet; sand hills and prairies comprise the slope toward the Missouri River, which forms the east boundary and is entered by the Niobrara, Platte, and Big Blue Rivers. Many deep-flowing artesian wells are found, principally in the east and northeast.

Industries: Agriculture, mainly corn, wheat, wild hay, oats, barley, sugar beets, potatoes, soybeans, sorghums; many swine and cattle are raised. Important industries are meat-packing, flour milling, printing, and

publishing; bread and bakery products, furniture, drugs, ice cream.

Other Facts: The territory was first explored by Coronado, and in 1769 was ceded to Spain by France and sold to Napoleon in 1801. The Louisiana Purchase of 1803 included Nebraska, and an American military post (Fort Atkinson) was established 16 years later, following the expeditions of Lewis and Clark, the Astorians, and Major Long.

Interesting Features include Masacre Canyon Monument in Hitchcock County—the site of a historic battle between the Sioux and Pawnee Indians, six State parks, the Tri-County, Loup River, and Sutherland irrigation and power projects, over 25 lakes for fishing, the University of Nebraska at Lincoln.

Nevada

Origin of Name: The Spanish word for "snow-clad."

Entered Union, 1864.

Population: 110,247; rank 49th, (counting the District of Columbia).

Area: 110,540 square miles; rank 6th.

Capital: Carson City.

Leading Cities: Reno, Las Vegas.

State Flower: Sagebrush.

Motto: All For Our Country.

Known as Silver State or Sagebrush State.

Representatives in U.S. House, 1.

Geographic Features: Several mountain ranges rise to a height of 5,000 feet or more; the Humboldt River flows south and southwest to the eastern slope of the Sierra Nevadas. The Colorado River forms a portion of the southeast boundary. Largest lakes in the state include Pyramid Lake with a water surface of 390 square miles in the northwest, Ruby Lake in the northeast, and Walker Lake in the west.

Industries: Agriculture, mainly potatoes, wheat, barley; sheep, cattle, horses, swine are raised. Manufactured

products include lumber, bread, butter, ice; printing and publishing are also important. Gold, silver, copper, arsenic, antimony, zinc, lead, mercury, borax, sulphur, tungsten are mined.

Other Facts: First permanent settlement in the territory was a trading post established by the Mormons in 1849 near the Carson River. In 1859 the discovery of the Comstock Lode, a silver mine, drew vast numbers of fortune seekers to Nevada. The state has become noted as a resort because of the brief period of residence required to obtain a divorce.

Interesting Features are Boulder Dam, highest dam in the world (726 feet in height), on the Colorado River; Gypsum Cave northeast of Las Vegas; University of Nevada in Reno; 5 State parks including Cathedral Gorge, Kershaw Canyon, Beaver Dam, and historic Fort Churchill (built in 1860); four Indian reservations.

New Hampshire

Origin of Name: From the County of Hampshire in England.

Entered Union, 1788.

Population: 491,524; rank 45th.

Area: 9,304 square miles; rank 43rd.

Capital: Concord.

Leading Cities: Manchester, Nashua, Concord, Berlin.

State Flower: Purple Lilac.

Motto: None.

Known as Granite State.

Representatives in U.S. House, 2.

Geographic Features: White Mountains in the north comprise 86 peaks, the highest of which is Mount Washington (6,293 feet). In the south lies a rolling upland region between the Connecticut River—which forms the greater part of the eastern boundary—and the Merrimac River; the land slopes east from the Merrimac to a sandy beach on the short stretch of seacoast. Of the many glacial lakes scattered throughout the state, Lake Winnepesaukee is the largest.

Industries: Agriculture, mainly dairying; many apples, berries, peaches, vegetables are grown. Manufactured are leather products, textiles, paper and pulp, lumber, iron, steel, electrical equipment, stone and clay articles. Minerals include granite, feldspar, mica, quartz, garnet, lead, silver, gold, copper, fluorspar, sand and gravel.

Other Facts: First settlement in the state, which was one of the original thirteen colonies, was made at Dover in 1623. Of all the New England states, New Hampshire is the only one to observe Fast Day—the last Thursday in April—proclaimed in 1681 as a day of public fasting and prayer.

Interesting Features include the Cannon Mountain Aerial Tramway, Glen Ellis Falls, White Mountain National Forest, the Belknap Mountains Recreation Area, Lost River reservation, Dartmouth College at Hanover,

New Jersey

Origin of Name: From the Island of Jersey.

Entered Union, 1787.

Population: 4,160,165; rank 9th.

Area: 7,836 square miles; rank 45th.

Capital: Trenton.

Leading Cities: Newark, Jersey City, Paterson, Trenton, Camden, Elizabeth, East Orange, Atlantic City, Passaic, Union City, Irvington, Hoboken.

State Flower: Violet.

Motto: Liberty and Prosperity.

Known as Garden State.

Representatives in U.S. House, 14.

Geographic Features: New Jersey is bounded by the Hudson River and Atlantic Ocean on the east, and the Delaware River and Bay on the west and south. A central plain comprises most of the southern region, while in the northwest lie the Orange Mountains, Ramapo Hills, and the Appalachians; parallel to the latter is a plateau called the Highlands. The

Delaware Water Gap in the west is a break in the Kittatinny Ridge, which rises 1,200 feet above the Delaware River.

Industries: Agriculture, mainly apples, cranberries, peaches, hay, corn, tomatoes, asparagus, potatoes, poultry, milk, eggs. Manufactured are paints, varnishes, textiles, electrical machinery, leather goods, pottery, glass, tile, brick, chemicals, soap, jewelry. Petroleum refineries, copper smelters, meat-packing houses, foundries, shipbuilding yards are numerous. Minerals include iron ore, zinc, building stone, clay, magnetite.

Other Facts: The first permanent settlements were made by Sweden along the Delaware River, and were later taken by the Dutch in 1655 and by the English in 1664. Forming part of the grant to the Duke of York, the territory was one of the original thirteen colonies and was the site of the Revolutionary War battles of Trenton, Princeton, and Monmouth.

Interesting Features include Morristown National Historical Park, High Point Park in the northwest, the first lighthouse built in America (1764) at Sandy Hook, Princeton University in Princeton, Palisades Interstate Park, and a viaduct 10 miles long connecting the Newark airport with the Holland Tunnel and Manhattan.

New Mexico

Origin of Name: From the Aztec Indian word "mexitli."

Entered Union, 1912.

Population: 531,818; rank 42nd.

Area: 121,666 square miles; rank 4th.

Capital: Santa Fe.

Leading Cities: Albuquerque, Santa Fe, Roswell, Hobbs.

State Flower: Yucca.

Motto: Crescit Eundo (It Grows as It Goes).

Known as Sunshine State.

Representatives in U.S. House, 2.

Geographic Features: New Mexico is in the southwest part of the nation, north of Mexico, and contains a section of the Rocky Mountains ranging north and south and reaching 14,000 feet in height. The east is drained by the Pecos River, and the central and west portion by the Rio Grande. Toward the south are desert-like plains, notably the Great White Sands, while Carlsbad Caverns are in the limestone region of the southeast. Dense forests (principally fir and pine) cover more than 8,500,000 acres.

Industries: Agriculture, mainly corn, potatoes, wheat, cotton, grain sorghums, fruit, sugar beets; manufacturing, mainly lumber, clay products, petroleum refining, textiles. Numerous cattle and sheep are raised. The important minerals include copper, gold, silver, coal, zinc, sandstone, granite, limestone, turquoisc, petroleum.

Other Facts: The region was acquired by the United States after the war with Mexico, in 1848; southwestern New Mexico was added in 1853 by the Gadsden Purchase, at a cost of \$10,000,000.

Interesting Features include Elephant Butte on the Rio Grande; El Vado Dam on the Chama River; ancient pueblo villages; the largest Indian reservation in the world (16,000,000 acres) occupied by the Navajos; Aztec National Monument; Carlsbad Caverns National Park; the highest golf course in the world (9,000 feet above sea level) near Alamogordo; University of New Mexico in Albuquerque.

New York

Origin of Name: In honor of the Duke of York.

Entered Union, 1788.

Population: 13,479,142; rank 1st.

Area: 49,576 square miles; rank 29th.

Capital: Albany.

Leading Cities: New York, Buffalo,

Rochester, Syracuse, Yonkers, Albany, Utica, Schenectady, Binghamton, Niagara Falls, Troy, Mount Vernon.

State Flower: Rose.

Motto: Excelsior (Higher, More Elevated).

Known as Empire State.

Representatives in U.S. House, 45.

Geographic Features: New York is south of the St. Lawrence River and Lake Ontario, west of Niagara River, and touches the Atlantic Ocean in the southeast. In the northeast the Adirondack Mountains reach a height of 5,344 feet (Mount Marcy); the Catskill Mountains are in the southeast. The Lake Champlain-Hudson River valley lies along the eastern boundary, while the Allegheny River (southwest) and the Susquehanna and Delaware Rivers (southeast) drain into the Atlantic. Long Island lies between the Atlantic and Long Island Sound below Connecticut.

Industries: Agriculture, mainly dairying, cheese, corn, oats, wheat, cabbage, maple sugar, barley, onions, potatoes, fruit. Manufactured are textiles, liquors, tobacco, chemicals, iron and steel. Meat-packing, garment manufacturing, sugar refining, printing, oil refining are important. Minerals produced include salt, sandstone, iron ore, limestone, gypsum, talc, slate, oil. New York City is America's leading seaport, and the financial and commercial capital of the country. It is famous for its skyscrapers, subways, and bridges. It is the nation's center for the theater, music, radio broadcasting, book and periodical publishing.

Other Facts: First settled by the Dutch in 1624, New York was later claimed by the French who were driven out by the English in 1763. It adopted a state constitution in 1777 and a year later was recognized as one of the original thirteen states.

Interesting Features include the Statue of Liberty in New York Harbor, Coney Island (a noted amusement

park) in Brooklyn; famous resorts at Lake Placid, Saranac Lake, Niagara Falls, the Thousand Islands, Southampton (on Long Island), the Catskills; 54 institutions of higher learning—among them Columbia University in New York City and the Universities of Rochester and Syracuse.

North Carolina

Origin of Name: From Carolus, the Latin version of the name of King Charles I of England.

Entered Union, 1789.

Population: 3,571,623; rank 11th.

Area: 52,712 square miles; rank 27th.

Capital: Raleigh.

Leading Cities: Charlotte, Winston-Salem, Durham, Greensboro, Asheville, Raleigh, High Point, Wilmington.

State Flower: Dogwood.

Motto: Esse Quam Videri (To Be Rather Than To Seem).

Known as Old North State, Tarheel State, and Turpentine State.

Representatives in U.S. House, 12.

Geographic Features: In the west are the Appalachian Mountains rising to a height of 6,684 feet (Mount Mitchell), and the Blue Ridge Mountains; in the northwest are the Great Smoky Mountains. Along the coast on the east lie numerous swampy regions and creeks. The chief rivers flow generally southeast to the Atlantic Ocean, and include the Roanoke, Neuse, Tar, Cape Fear, Wateree, and Pedee.

Industries: Agriculture, mainly tobacco, cotton, corn, hay, truck crops, peanuts, apples, peaches, potatoes; manufacturing, mainly cigarettes, cotton goods, knit goods, lumber, furniture, tile, brick, cottonseed products, fertilizer. Important minerals include mica, clay, coal, feldspar, barytes, talc, kyanite, zircon, monazite.

Other Facts: First settled by the English at Roanoke Island in 1585, North Carolina was the site of a battle at Guilford Courthouse during the

Revolution and was one of the original thirteen colonies. Fort Fisher was the scene of a naval bombardment in the Civil War.

Interesting Features include the Great Smoky Mountains National Park, Kill Devil Hill National Memorial (site of the Wright Brothers' airplane flight in 1903), the Cherokee Indian reservation, Biltmore House in Asheville, University of North Carolina in Chapel Hill, Duke University in Durham.

North Dakota

Origin of Name: Dakota is a Sioux Indian word.

Entered Union, 1889.

Population: 641,935; rank 39th.

Area: 70,665 square miles; rank 16th.

Capital: Bismarck.

Leading Cities: Fargo, Grand Forks, Minot, Bismarck.

State Flower: Wild Prairie Rose.

Motto: Liberty and Union, One and Inseparable Now and Forever.

Known as Flickertail State or Sioux State.

Representatives in U.S. House, 2.

Geographic Features: Bounded in the north by Manitoba and Saskatchewan, North Dakota is separated from Minnesota on the east by the Red River which flows through a wide valley. A plateau comprises the western portion of the state, and contains the divide between the Souris River (that empties into Hudson Bay) and the Missouri River. Pierce County, 50 miles west of Devils' Lake, is the geographic center of North America.

Industries: Agriculture, mainly spring wheat, durum wheat, flax seed, rye, oats, barley, wild hay, corn; in the manufacturing centers are flour and feed mills, meat-packing plants, factories producing pottery, brick, and tile. The principal minerals are lignite coal and clay.

Other Facts: The first settlement in

the territory was a trading post established in 1797 on the site of the present town of Pembina; included as part of the Louisiana Purchase in 1803, the region was organized in 1861 as the Territory of Dakota.

Interesting Features include the International Peace Garden (containing a great variety of song birds) in the Turtle Mountains in the north, the State Historical Museum at Bismarck, 6 State parks, University of North Dakota at Grand Forks, and four Indian reservations.

Ohio

Origin of Name: From an Iroquois Indian name.

Entered Union, 1803.

Population: 6,907,612; rank 4th.

Area: 41,222 square miles; rank 34th.

Capital: Columbus.

Leading Cities: Cleveland, Cincinnati, Columbus, Toledo, Akron, Dayton, Youngstown, Canton, Springfield, Lakewood.

State Flower: Scarlet Carnation.

Motto: None Imperium en Imperio (A Government Within a Government).

Known as Buckeye State.

Representatives in U.S. House, 23.

Geographic Features: Bounded by Lake Erie and Michigan in the north and by the Ohio River on the south, the state contains no mountains of great height but is hilly in the south-east. Principal rivers include the Maumee, Sandusky, and Cuyahoga, which flow into tributaries of the Ohio River and Lake Erie; among the lakes are St. Mary's Lake in the southwest, Indian Lake in the northwest, Buckeye Lake in the central region.

Industries: Agriculture, mainly oats, corn, hay, winter wheat, tobacco, potatoes, grapes; sheep are raised for wool. Manufactured products are motor vehicles, iron and steel, electrical machinery, rubber goods, pottery, brick

and tile, clothing; meat-packing plants, creameries, railroad repair shops are numerous. Principal minerals are iron ore, coal, gypsum, salt, petroleum.

Other Facts: The first permanent settlement in Ohio was established in 1788, after the French had ceded the region to the English in 1763. The capital was formerly at Chillicothe (designated in 1799 by Congress) and at Zanesville from 1809 until 1817.

Interesting Features include Serpent Mound (made by the pre-historic Mound Builders) in Adams County, George Rogers Clark Park, the birthplace of Thomas Edison at Milan, Cedar Falls and Ash Cave in Hocking County, Bryan State Park, Ohio State University, the Universities of Akron and Cincinnati.

Oklahoma

Origin of Name: A Choctaw Indian word.

Entered Union, 1907.

Population: 2,336,434; rank 22nd.

Area: 69,919 square miles; rank 17th.

Capital: Oklahoma City.

Leading Cities: Oklahoma City, Tulsa, Muskogee, Enid.

State Flower: Mistletoe.

Motto: Labor Omnia Vincit (Labor Conquers All Things).

Known as Sooner State.

Representatives in U.S. House, 8.

Geographic Features: The state comprises a vast plain which is treeless in the west, but in the east are the Ozark Mountains (densely forested), and further west rise the Wichita and Chautauqua mountains. The Red River forms the southern boundary, and the Missouri River flows east through the central part of the state. In the northwest are the Great Salt Plains and a high tableland, the latter reaching an altitude of 4,700 feet.

Industries: Agriculture, mainly corn, oats, potatoes, grain sorghums, hay, fruit, cotton; sheep are raised for wool.

In the manufacturing centers are petroleum refineries, flour and feed mills, zinc smelters and refineries, foundries and machine shops, cement factories, cottonseed oil mills. Natural gas, lead, oil, and zinc are produced.

Other Facts: First explored by the Spaniards, the region was still unsettled except by Indians when it was bought (all but the Panhandle in the northwest) by the United States in the Louisiana Purchase of 1803. The remainder of the territory was acquired with the annexation of Texas. Set aside as an Indian reservation in 1834, Oklahoma was opened to admit white settlers in 1889.

Interesting Features include Grand River Dam near Claremore, Platt National Park, curative mineral waters at Sulphur, Guthrie, and Claremore, 27 Indian reservations, University of Oklahoma at Norman.

Oregon

Origin of Name: Uncertain, possibly derived from "Orejon" or "Oregones," a Spanish name for "big-eared men."

Entered Union, 1859.

Population: 1,089,684; rank 34th.

Area: 96,981 square miles; rank 9th.

Capital: Salem.

Leading Cities: Portland, Salem, Eugene, Klamath Falls.

State Flower: Oregon Grape.

Motto: The Union.

Known as Sunset State, Beaver State, or Webfoot State.

Representatives in U.S. House, 4.

Geographic Features: In the northwestern part of the nation, Oregon is bounded on the west by the Pacific Ocean; in the west central part of the state rise the Cascade Mountains which reach a height of 11,225 feet (Mount Hood), while the Coast mountain range several miles inland runs nearly parallel to the seacoast and the Willamette Valley. The important rivers include the Columbia, flowing southwest into the Pacific, and the

Snake which has its course along the north half of the eastern boundary.

Industries: Agriculture, mainly hops, winter wheat, hay, oats, potatoes, fruit, flax, walnuts; sheep are raised for wool, and salmon fishing provides an important industry. In the manufacturing centers are foundries, machine and railroad shops, flour and feed mills, canneries; lumber, paper, and wood pulp are produced. Important minerals include gold, silver, copper, mercury, lead, oil, iron ore, platinum, clay.

Other Facts: The region was first explored by Spaniards, later by Captain Gray (1792), and by Lewis and Clark (1803), who erected Fort Clatsop near the present site of Astoria, where John Jacob Astor's Pacific Fur Company built a fort (1811) that was captured by the British in the War of 1812. At Champoege in 1843 a provisional government was established, and Oregon Territory was organized in 1849.

Interesting Features are Crater Lake National Park, Columbia Highway, the Bonneville Dam on the Columbia River, gigantic redwood forests in the southwest, University of Oregon at Eugene.

Pennsylvania

Origin of Name: In honor of William Penn.

Entered Union, 1787.

Population: 9,900,180; rank 2nd.

Area: 45,333 square miles; rank 32nd.

Capital: Harrisburg.

Leading Cities: Philadelphia, Pittsburgh, Scranton, Erie, Reading, Allentown, Wilkes-Barre, Harrisburg, Johnstown, Lancaster, Chester.

State Flower: Mountain Laurel.

Motto: Virtue, Liberty, and Independence.

Known as Keystone State.

Representatives in U.S. House, 33.

Geographic Features: Bounded on the north by Lake Erie and New York,

and by the Delaware River on the east, Pennsylvania is traversed from northeast to southwest (in the central region) by the Appalachian mountain range. Important rivers include the Susquehanna, Allegheny, and Monongahela; the latter two drain the western section of the state, coming together at Pittsburgh to form the Ohio River. The largest lakes are Conneault Lake in Crawford County and Pymatuning Lake (artificially made to control the Beaver and Shenango Rivers) in the same district.

Industries: Agriculture, mainly buckwheat, winter wheat, oats, rye, potatoes, corn, tobacco, fruit; manufacturing, mainly iron and steel products, locomotives, automobiles, leather goods, glass, pottery, textiles, oil refining. Coal is the most important mineral produced.

Other Facts: One of the original thirteen colonies, Pennsylvania was first settled in 1682 by William Penn (who had been granted a charter for the region by Charles II of England) accompanied by colonists from many countries. The Declaration of Independence was written and signed in Philadelphia, where the U.S. Constitution was later formulated.

Interesting Features include Valley Forge, Battlefield of Gettysburg, Pennsylvania Turnpike—a highway (160 miles long) from Harrisburg to Pittsburgh, Independence Hall and the Liberty Bell in Philadelphia, University of Pennsylvania in Philadelphia, Lehigh University at Bethlehem.

Rhode Island

Origin of Name: From a former name, Isles of Rhodes.

Entered Union, 1790.

Population: 713,346; rank 36th.

Area: 1,214 square miles; rank 48th.

Capital: Providence.

Leading Cities: Providence, Pawtucket, Woonsocket, Cranston.

State Flower: Violet.

Motto: Hope.

Known as Little Rhody and Charter Colony.

Representatives in U.S. House, 2.

Geographic Features: Bounded on the south by the Atlantic Ocean, Rhode Island is the smallest of the States, with a hilly and rolling surface having its highest elevation at Durfee Hill (806 feet) in Gloucester. Among the numerous swift, short rivers are Moohausic and Wyopoke, which flow into Narragansett Bay.

Industries: Agriculture, mainly vegetables, fruits; manufactured products include textiles (especially cotton cloth), textile machinery, silverware, jewelry. No minerals of great importance are mined.

Other Facts: The first settlement in the region was made by Roger Williams in 1636 at Providence, which was later combined with three other villages (Portsmouth, Newport, and Warrick) to form the Colony of Providence Plantations. One of the original thirteen colonies, it was officially given its present name in 1776.

Interesting Features include the Naval War College at Newport, Bailey's Beach on the Ocean Drive (a noted resort), Old Slater Mill in Pawtucket, the oldest Baptist Church in the nation (erected in 1775) at Providence, Rhode Island State College at Kingstown, the America Cup Races which are sailed off Newport.

South Carolina

Origin of Name: From Carolus, the Latin version of the name of King Charles I of England.

Entered Union, 1788.

Population: 1,899,804; rank 26th.

Area: 31,055 square miles; rank 39th.

Capital: Columbia.

Leading Cities: Greenville, Spartanburg, Charleston, Anderson, Florence, Orangeburg, York, Sumter, Horry, Aiken.

State Flower: Yellow Jessamine.

Motto: Dum Spiro, Spero (While I Breathe, I Hope).

Known as Palmetto State, Rice State, and Swamp State.

Representatives in U.S. House, 6.

Geographic Features: Separated from Georgia on the southwest by the Savannah River, South Carolina is crossed by the Blue Ridge Mountains in the northwest reaching a height of 3,548 feet. The most important rivers are the Pedee, Edisto, and Santee, which rise in the west and flow generally southeast to the Atlantic Ocean. The seacoast of the state is marshy, containing numerous sandy areas known as sea islands.

Industries: Agriculture, mainly tobacco, rice, cotton, corn, sweet potatoes, oats, peaches, peanuts. Manufactured products include lumber, cottonseed oil, cotton goods, fertilizer; among the minerals are granite, phosphate rock, gold, silver, iron ore, clay, manganese, monazite, lime.

Other Facts: The first permanent settlement was made by English colonists near the present city of Charleston in 1670. One of the original thirteen colonies, it was the eighth state to join the Union, from which it seceded in 1860 and was readmitted after the Civil War.

Interesting Features include 16 State parks, Middleton Place Gardens (oldest formal gardens in the nation) at Charleston, the oldest Chamber of Commerce in the United States (founded in 1773), famous resorts at Aiken and Camden, University of South Carolina in Columbia.

South Dakota

Origin of Name: Dakota is a Sioux Indian word.

Entered Union, 1889.

Population: 642,961; rank 38th.

Area: 77,047 square miles; rank 15th.

Capital: Pierre.

Leading Cities: Sioux Falls, Aberdeen, Rapid City, Huron.

State Flower: The Pasque.

Motto: I Lead.

Known as Coyote State or Blizzard State.

Representatives in U.S. House, 2.

Geographic Features: Along the White River in the southwest are the Bad Lands, an eroded area northwest of which rise the Black Hills to an altitude of 7,242 feet (Harney Peak)—the highest point in the nation east of the Rocky Mountains. The northeast corner of South Dakota is drained by the Minnesota River, while the Missouri River flows across the middle of the state. Big Stone Lake (967 feet above sea level) is in the northeast.

Industries: Agriculture, mainly corn, wheat, cane, oats, barley, rye, flax seed, hardy fruit; livestock are raised; manufacturing, mainly lumber, cement, meat packing, flour and grist milling, butter and cheese; fox farming is an important industry. Among the minerals produced are gold, lithium, feldspar, bentonite, lignite, building stone, clay.

Other Facts: The region was part of the Louisiana Purchase in 1803, and was organized as a section of the Dakota Territory in 1861; settlement did not increase notably until after the conquest of the Sioux Indians.

Interesting Features include Wind Cave National Park in the Pahasaba region of the Black Hills, Mount Rushmore (6,200 feet high) on the granite face of which are sculptured the heads of George Washington, Thomas Jefferson, Abraham Lincoln and Theodore Roosevelt; the largest gold producing mine in the nation, at Lead; the University of South Dakota at Vermillion.

Tennessee

Origin of Name: From Tennesse, a Cherokee Indian name.

Entered Union, 1796.

Population: 2,915,841; rank 15th.

Area: 42,245 square miles; rank 33rd.

Capital: Nashville.

Leading Cities: Memphis, Nashville, Chattanooga, Knoxville, Jackson.

State Flower: Iris.

Motto: Agriculture Commerce.

Known as Volunteer State.

Representatives in U.S. House, 10.

Geographic Features: In the east rise the Great Smoky Mountains; Reelfoot Lake is the reservoir basin of the Mississippi River, which forms the western boundary of the state, while Lookout Mountain has been carved by the Tennessee River flowing north through the state. Fall Creek Falls (256 feet) and Rock House Creek Falls (125 feet) are near Pikeville.

Industries: Agriculture, mainly corn, wheat, hay, oats, potatoes, peanuts, cotton, peas; the manufacturing sections have a large output of lumber, clay products, building stone, paper, wood pulp, iron and steel. The chief minerals produced are coal, iron ore, zinc, copper, gold, silver, clay, sandstone, phosphate rock, limestone, marble.

Other Facts: Tennessee was organized as a territory in 1790. The capital was formerly at Knoxville from 1792 until 1812, at its present site from 1812 until 1819, at Murfreesboro from 1819 to 1826, when Nashville once again became the capital.

Interesting Features include Norris Dam on the Clinch River near Knoxville, Fall Creek Falls Recreational Area, Great Smoky Mountains National Park, Cherokee National Forest, University of Tennessee in Knoxville, Vanderbilt University at Nashville.

Texas

Origin of Name: From Tejas, an Indian word.

Entered Union, 1845.

Population: 6,414,824; rank 6th.

Area: 267,339 square miles; rank 1st.

Capital: Austin.

Leading Cities: Houston, Dallas, San Antonio, Fort Worth, El Paso, Austin, Galveston, Beaumont, Corpus Christi, Waco.

State Flower: Bluebonnet.

Motto: Friendship.

Known as Lone Star State.

Representatives in U.S. House, 21.

Geographic Features: Texas is separated from Mexico in the west by the Rio Grande which flows southeast into the Gulf of Mexico. The Davis Mountains and other high ranges rise in the west, while the region east of the Pecos River consists of plains. In the central part of the state the Brazos and Colorado Rivers drain into the Gulf, as do the Sabine and Trinity Rivers in the east.

Industries: Agriculture, mainly cotton, peaches, apples, citrus fruit, dates, strawberries, figs, blackberries, corn, oats, wheat, sorghum, potatoes, rice, tomatoes, onions, peanuts, pecans. Cattle, sheep, mules, horses are raised. Manufactured products include cottonseed oil, cotton goods, building stone; meat-packing plants and petroleum refineries are numerous. Minerals found include coal, sulphur, petroleum, natural gas, gypsum, sandstone, granite, silver, potash.

Other Facts: First explored by the Spaniards, the region was formerly under the domination of Mexico until the conclusion of the war between the United States and Mexico (1846 to 1848), when the Rio Grande was fixed as the west boundary.

Interesting Features include the Alamo, a chapel in San Antonio where Texans fought Santa Anna's Mexican army in 1836; Santa Helena Canyon on the Rio Grande; the Port Arthur-Orange bridge (tallest highway bridge in the southern part of the nation, spanning the Neches River); Univer-

sity of Texas in Austin, Baylor University in Waco.

Utah

Origin of Name: From the Utes, an Indian tribe.

Entered Union, 1896.

Population: 550,310; rank 41st.

Area: 84,916 square miles; rank 10th.

Capital: Salt Lake City.

Leading Cities: Salt Lake City, Ogden, Provo, Logan.

State Flower: Sego Lily.

Motto: Industry.

Known as Mormon State, Salt Lake State, and Beehive State.

Representatives in U.S. House, 2.

Geographic Features: Utah contains several high mountain ranges, of which the loftiest peaks are King's Mountain in the northeast (13,498 feet in altitude), Mount Emmons in the same region (13,428 feet) and Delano Mountain (12,240 feet) in the southwest. The principal tributary of the Colorado River is the Green; the Great Salt Lake is in the northwest, and the most important canyons are the Zion and Bryce.

Industries: Agriculture, mainly sugar beets, other vegetables, fruit, wheat, oats, alfalfa, hay, rye, barley, corn, potatoes; over 2,200,000 sheep are raised. In the manufacturing districts are copper smelters, petroleum refineries, canneries, meat-packing plants, beet-sugar mills. Minerals produced include silver, gold, copper, lead, sulphur, salt, zinc, coal, petroleum, uranium, onyx, vanadium.

Other Facts: The territory was first settled by the Mormons (led by Brigham Young) in 1847, after their journey from the Midwest. Three-fourths of all Utah church members belong to the Latter Day Saints denomination.

Interesting Features include the Great Salt Lake (20 per cent salt), Cedar Breaks National Monument and

Zion and Bryce National Parks in the southwest, Utah State University in Salt Lake City, Brigham Young University at Provo.

Vermont

Origin of Name: From the two French words "vert" and "mont," meaning "green mountain."

Entered Union, 1791.

Population: 359,231; rank 46th.

Area: 9,609 square miles; rank 46th.

Capital: Montpelier.

Leading Cities: Burlington, Rutland, Barre, Brattleboro.

State Flower: Red Clover.

Motto: Freedom and Unity.

Known as Green Mountain State.

Representatives in U.S. House, 1.

Geographic Features: The Connecticut River forms the greater part of the east boundary, separating Vermont from New Hampshire, and receiving the West, White, and other rivers. Much of the west boundary is formed by Lake Champlain, into which flow the Lamoille, Missiquoi, and Winooski Rivers. Extending the entire length of the state are the Green Mountains with a maximum altitude of 4,393 feet (Mount Mansfield).

Industries: Agriculture, mainly dairying, vegetables, apples, and other fruit; manufacturing, mainly paper and wood pulp, woolen goods, granite and marble quarrying; asbestos, slate, and talc are produced.

Other Facts: One of the original thirteen colonies, Vermont was given the name of New Connecticut at the convention in Westminster in 1777; this was changed to the present name six months later. Bennington was the site of a notable battle between the Green Mountain Boys and the British in 1777.

Interesting Features include Bennington Monument, the Long Trail for hikers, Norwich University in Northfield (the second oldest military college in the nation), University of Vermont.

Virginia

Origin of Name: In honor of Elizabeth, the "Virgin Queen" of England.

Entered Union, 1788.

Population: 2,677,773; rank 19th.

Area: 40,815 square miles; rank 35th.

Capital: Richmond.

Leading Cities: Richmond, Norfolk, Roanoke, Portsmouth, Lynchburg, Newport News.

State Flower: American Dogwood.

Motto: Sic Semper Tyrannis (Thus Always to Tyrants).

Known as Old Dominion.

Representatives in U.S. House, 9.

Geographic Features: On the east coast halfway between Maine and Florida, Virginia rises from northeast to southwest in the Blue Ridge Mountains to an altitude of 5,719 feet (Mount Rogers). The Potomac River forms a portion of the northeast boundary. The Atlantic Ocean and Chesapeake Bay receive many of the numerous rivers, including the Rappahannock, James, and Roanoke.

Industries: Agriculture, mainly tobacco, cotton, corn, fruit, apples, peanuts; cattle and horses are raised. The manufacturing districts contain cigarette factories, silk and cotton textile mills, shipbuilding yards, pulp and paper mills. Important minerals produced are limestone, coal, feldspar, gold, clay, lead, gypsum, mica, manganese, salt, pyrite, slate, soapstone, zinc.

Other Facts: The first permanent settlement by the English in America was established at Jamestown in 1607. One of the original thirteen colonies, Virginia was the site of the British army's surrender at Yorktown in 1781, and General Lee's surrender in 1865 at Appomattox Court House near Lynchburg.

Interesting Features include Shenandoah National Park in the Blue Ridge Mountains; Virginia Beach near Norfolk; National Military Parks at Fred-

ericksburg, Manassas, Appomattox, and Petersburg; Arlington National Cemetery; Mount Vernon (home of George Washington); Monticello, near Charlottesville (home of Thomas Jefferson); Colonial National Historical Park; Washington and Lee University in Lexington; Williamsburg, the restored colonial capital of Virginia.

Washington

Origin of Name: In honor of George Washington.

Entered Union, 1889.

Population: 1,736,191; rank 30th.

Area: 68,192 square miles; rank 19th.

Capital: Olympia.

Leading Cities: Seattle, Spokane, Tacoma, Everett, Bellingham.

State Flower: Rhododendron.

Motto: Al-ki (Bye and Bye).

Known as Chinook State or Evergreen State.

Representatives in U.S. House, 6.

Geographic Features: Separated from Oregon on the south by the Columbia River, Washington contains the Cascade Mountains in the central part of the state (with Mount Rainier as the loftiest peak), while in the west are the Olympic Mountains and the Puget Sound basin. The Snake River irrigates the eastern region.

Industries: Agriculture, mainly apples, barley, wheat, oats, potatoes, corn, peaches, pears, peas, hops; cattle and sheep are raised in great numbers. In the manufacturing sections are lumber and feed mills, meat-packing plants, fruit canneries, paper and wood pulp mills, railroad shops. Minerals produced include coal, gold, silver, mercury, zinc, lead, clay, marble, granite, limestone, arsenic, antimony, platinum, tungsten.

Other Facts: The region was originally included in the Oregon Territory (comprising the land now covered by Washington, Oregon, Idaho, and part of Wyoming and Montana), the north

boundary of which was settled by the Webster-Ashburton Treaty between the United States and England in 1846.

Interesting Features include the Grand Coulee Dam on the Columbia River; Mount Rainier—an inactive volcano 14,408 feet in altitude and covering 100 square miles; the warm springs at Longmire; University of Washington in Seattle.

West Virginia

Origin of Name: In honor of Elizabeth, the "Virgin Queen" of England.

Entered Union, 1863.

Population: 1,901,974; rank 25th.

Area: 24,181 square miles; rank 40th.

Capital: Charleston.

Leading Cities: Huntington, Charleston, Wheeling, Clarksburg, Parkersburg.

State Flower: Rhododendron.

Motto: Montani Semper Liberi (Mountaineers Always Free).

Known as Mountain State.

Representatives in U.S. House, 6.

Geographic Features: West Virginia contains several ranges of the Appalachian Mountains which include New River Canyon and the Monongahela National Forest on the Monongahela River in the east. The Ohio River forms the northwest boundary and a portion of the southwest border, while the principal eastern river is the Potomac.

Industries: Agriculture, mainly wheat, oats, hay, tobacco, corn, potatoes, apples, plums, peaches, grapes; manufacturing, mainly glass, stone, chemicals, lumber, petroleum refining, leather, pottery; meat-packing plants, steel rolling mills and blast furnaces are important. Soft coal, natural gas, and petroleum are produced.

Other Facts: The first settlement was made in about 1719 by English colonists on or close to the present site of Shepherdstown. During Dunmore's War, following the French and Indian War, Point Pleasant, at the mouth of

the Great Kanawha River, was the site of a battle in 1774. Until 1863 the state was a part of Virginia.

Interesting Features include the Mineral Springs at White Sulphur and Greenbrier County, 13 State parks, Seneca Rocks, trails and camping sites in the Monongahela National Forest, University of West Virginia in Morgantown.

Wisconsin

Origin of Name: From the Indian name Ouisconsin or Miconsing.

Entered Union, 1848.

Population: 3,137,587; rank 13th.

Area: 56,154 square miles; rank 25th.

Capital: Madison.

Leading Cities: Milwaukee, Madison, Racine, Kenosha, Green Bay, La-Crosse, Sheboygan, Oshkosh.

State Flower: Violet.

Motto: Forward.

Known as Badger State.

Representatives in U.S. House, 10.

Geographic Features: Bounded on the north by Lake Superior and Michigan, and partly by Lake Michigan on the east, Wisconsin contains numerous lakes, the largest of which is Winnebago. The Wisconsin River flows 600 miles southwest across the state and joins the Mississippi. Huge quartzite bluffs are found in Sauk County, and the main waterfalls are Copper and Bad River falls.

Industries: Agriculture, mainly dairying, corn, rye, wheat, barley, hay, potatoes, sugar beets, tobacco, peas, hops, sorghum, maple syrup, cranberries, plums, cherries. In the manufacturing sections are meat-packing plants, foundries and machine shops, paper and wood pulp mills, beet-sugar refineries; leather goods, motor vehicles, electrical machinery are produced. Iron ore and zinc are among the chief minerals.

Other Facts: Originally explored in the 17th century by the French, Wis-

consin later was under British control until after the War of 1812. It was the first state to establish a co-operative crop reporting organization jointly with the government.

Interesting Features include Devil's Lake in Sauk County, waterfalls in the Bad River near Mellen, University of Wisconsin at Madison, the copper-hued rocks flanking Copper Falls, Marquette University at Milwaukee.

Wyoming

Origin of Name: From the name of Wyoming Valley, Pennsylvania.

Entered Union, 1890.

Population: 250,742; rank 48th.

Area: 97,914 square miles; rank 8th.

Capital: Cheyenne.

Leading Cities: Cheyenne, Casper.

State Flower: Indian Paintbrush.

Motto: Cedant Arma Togae (Let Arms Yield to the Gown).

Known as Equality (Suffrage) State.

Representatives in U.S. House, 1.

Geographic Features: Wyoming is traversed by the Rocky Mountains which reach a height of 13,785 feet (Mount Gannett) and include the Big Horn Range in the central part of the state. The Yellowstone and Snake Rivers drain the northwest, while in the east or southeast flow the Powder, Sweetwater, North Platte, and Laramie Rivers. The Great Falls of the Yellowstone are larger than Niagara.

Industries: Agriculture, mainly corn, sugar beets, wheat, oats, potatoes, alfalfa, fruit, dairying; many cattle and sheep are raised. Petroleum products, meat-packing plants, lumber and feed mills, beet-sugar factories are numerous. Minerals include coal, gold, silver, iron ore, copper, oil.

Other Facts: First white settlement was Fort Laramie in about 1834. In 1869 the Territorial Legislature of Wyoming passed an act granting the first guarantee of suffrage to women in the United States.

Interesting Features include Yellow-

stone National Park in the northwest, the Grand Teton National Park, 6 National Forests, the Shoshone Indian Reservation in the central part of the

state, Thermopolis Hot Springs in Hot Springs County, Saratoga Mineral Hot Springs, Shoshone Cavern, the University of Wyoming in Laramie.

TERRITORIES OF THE UNITED STATES

Alaska

Population: 72,524.

Area: 586,400 square miles.

Capital: Juneau.

Leading Cities: Juneau, Ketchikan, Anchorage, Fairbanks.

Territorial Flower: Forget-me-not.

Delegates to Congress, 1.

Geographic Features: Occupying the northwest section of North America, Alaska includes within its boundaries the Aleutian Islands and all other islands near its coast except Cooper and Bering. In the Alaska Range in the south are Mount McKinley (20,300 feet above sea level), Mount Foraker (17,000 feet), and Mount Russell (11,500 feet). The most important rivers are the Yukon—flowing across the territory to the Bering Sea—and three tributaries: the Porcupine in the north, the Koyukuk in the west, and the Tanana in the south central region. In the southwest lie the largest lakes, Iliamna and Clark, as well as the Kuskokwim River. Southeast Alaska comprises a narrow strip between British Columbia and the Pacific Ocean.

History: The name was adopted from Al-ay-es-ka or Alakh-Shak, an Eskimo or Inuit word meaning Great Country. Purchased by the United States from Russia for \$7,200,000 in 1867 during President Andrew Johnson's administration, Alaska was made a territory by an act of Congress in 1912.

Industries: Agriculture, mainly dairying, eggs, vegetables, grains, tobacco, fruit; manufacturing, mainly iron and steel, motor vehicles, lumber, petroleum refining, cotton and wool

products, paper, meat-packing. Important minerals include gold, silver, coal, petroleum, copper, platinum, iron ore; furs and fur skins, canned salmon, blubber oil, seal meat are exported.

Interesting Features: Three National Monuments—Glacier Bay, Katmai, and Sitka; National Forest System comprising 20,850,000 acres; McKinley National Park (3,030 square miles), created to protect large herds of caribou and mountain sheep; Alaska Highway (1,671 miles in length) from Dawson Creek in Alberta to Fairbanks, Alaska; the University of Alaska near Fairbanks.

Hawaii

Population: 423,330.

Area: 6,454 square miles.

Capital: Honolulu.

Leading Cities: Honolulu, Hilo.

Delegates to Congress, 1.

Geographic Features: Located in the north Pacific Ocean—over 2,000 miles from the nearest mainland—Hawaii comprises 20 mountainous, volcanic islands of which the most important are Oahu, Hawaii, Maui, Molokai, Lanai, Kahoolawe, Kauai, and Niihau. Active volcanoes are Kilauea (4,090 feet in altitude) and Mauna Loa (13,686 feet) on the island of Hawaii, which is separated from Maui by the Alenuihaha Channel. Haleakala on Maui is the largest extinct crater in the world.

History: Discovered by Captain James Cook in 1778, the Hawaiian Islands were made a constitutional monarchy in 1840. Queen Liliuokalani was dethroned by a revolution in 1893,

and five years later the islands voluntarily became a territory of the United States. The bombing of Pearl Harbor by the Japanese in 1941 precipitated our entry into the Second World War.

Industries: Agriculture, mainly pineapple, bananas, potatoes, coffee, sugar, nuts, papayas; cattle, swine, poultry, rabbits are raised. Manufacturing con-

sists largely of canning and lumber products, while fishing is a prominent industry.

Interesting Features: The University of Hawaii at Honolulu, the active and extinct volcanoes, a leper colony at Kalawao on the island of Molokai, forest reserves covering over 1,000,000 acres.

DEPENDENCIES OF THE UNITED STATES

The Philippine Islands

Population: 16,350,000.

Area: 115,600 square miles.

Capital: Manila.

Leading Cities: Manila, Cebu Zamboanga, Davao, Iloilo, Bacolod, Baguio.

Geographic Features: Located in the Pacific Ocean north of the Netherlands Indies, and separated from southeast Asia by the South China Sea, the Philippines comprise 7,083 mountainous, volcanic islands. The largest are Luzon, Mindanao, Panay, Palawan, Mindoro, Samar, Negros, Leyte, Bohol, Cebu, and Masbate. Most noted of the 20 more or less active volcanoes are Mount Apo (9,610 feet in altitude) on Mindanao, and Mayan Volcano (7,943 feet) on Albay. The principal rivers are the Cagayan (220 miles long) in north Luzon, and in Mindanao the Agusan and Mindanao Rivers; largest of the lakes are Laguna de Bay and Taal in Luzon and Lanao in Mindanao.

History: Discovered in 1521 by Magellan, the Philippines were named in 1542 by a Spanish expedition in honor of Prince Philip (later Philip II) of Spain. They were ruled by Spain until 1898, when the United States purchased them (together with Puerto Rico and Guam) for \$20,000,000. In 1899 an insurrection broke out, led by Aguinaldo, who was captured in 1901, and the rebellion was brought to an

end the following year. The islands were occupied by Japan in 1942 and liberated by American forces in 1945. The islands are to be freed from the United States in 1946, when they will become an independent republic.

Industries: Agriculture, mainly pineapples, papayas, sugar, mangoes, coconut oil, oranges, corn, tobacco, palay (unhusked rice), abaca (Manila hemp). Manufactured products include lumber, rope, twine, resins, rubber, quinine; the most important minerals are gold, silver, lead, copper, zinc, iron ore, coal, asbestos, salt, petroleum, manganese, marble, chromite.

Interesting Features: University of the Philippines at Manila, Dominican University of Santo Tomas (founded in 1611—oldest university under the American flag), the leper colony on the island of Culio, Clark Field in Luzon.

Wake Island

Area: Combined with Wilkes and Peale Islands, about 2,600 acres.

Geographic Features: Wake Island is located in the Pacific Ocean 1500 miles northeast of Guam.

History: Acquired for the United States in 1898 by General Greene, commander of the Second Detachment Philippine expedition, Wake Island was made a landing stage in 1935 for airplanes, and was captured by the Japanese in 1941.

Midway Islands

Population: 118.

Area: 28 square miles.

Geographic Features: Consisting of Sand and Eastern Islands, the Midway Islands are located in the Pacific Ocean, 1325 miles northwest of Honolulu.

History: Midway Islands were acquired by the United States as part of Hawaii in 1898, and in 1935 were made a landing stage for airplanes.

Canal Zone and Panama Canal

Population: 51,827.

Area: 553 square miles.

Leading Cities: Balboa, Ancon, Cristobal.

Geographic Features: Located between the Caribbean Sea and the Gulf of Panama, Canal Zone extends five miles on each side of the axis of the Panama Canal. In the north lies Gatun Lake, normally 85 feet above sea level, with an area of 163.4 square miles.

History: The Zone was purchased from Panama by the United States in 1904 for \$10,000,000, with additional annual payments of \$250,000.

Interesting Features: The Panama Canal, army airports at Albrook Field on Balboa Heights in the south, and France Field in the north.

The Panama Canal, a waterway across the Isthmus of Panama, connects the Atlantic and Pacific Oceans and is of the lock and lake type. Built by the United States, the canal extends south and southeast from Limon Bay on the Atlantic to the Bay of Panama on the Pacific (40.27 miles long from shore to shore), and the highest summit elevation is 85 feet above the ocean. The maximum width of the canal is 1000 feet, the average bottom depth is 649 feet, and the usual time of passage is from seven to eight hours. The work of construction began in 1904 and the canal was officially opened for operation in 1914. The Third Locks Project,

authorized by an Act of Congress in 1939, provides for the building of an additional set of locks to be located approximately parallel to the locks at Miraflores, Gatun, and Pedro Miguel.

Puerto Rico

Population: 1,869,255.

Area: 3,435 square miles.

Capital: San Juan.

Leading Cities: San Juan, Ponce, Mayaguez.

Geographic Features: Bounded by the Atlantic Ocean on the north, the Caribbean Sea on the south, and separated from the Dominican Republic on the west by Mona Passage, Puerto Rico is 1,425 miles southeast of New York. Mountainous from east to west through the central region, the island has its highest elevation at Mount Calderona (4,398 feet). The most important river is the Grande Anasco in the west; the islands of Vieques and Culebra in the east and Mona in the west are included within the boundaries of Puerto Rico.

History: Puerto Rico was discovered in 1493 by Columbus, and the first settlement was made at Caparra in 1508 by Ponce de Leon. The island was attacked at various times by the British and Dutch before it was acquired from Spain by the United States after the Spanish-American War in 1898.

Industries: Agriculture, mainly sugar, oranges, coffee, pineapples, tobacco, grapefruit; manufacturing, mainly silk and cotton goods, linen, needlework, rum, canning. The chief minerals are quarry products and manganese.

Interesting Features: The University of Puerto Rico in Rio Piedras; the Polytechnic Institute of Puerto Rico at San German; many forests containing palms, ebony, mahogany, Spanish cedar, ausubo, laurel, dyewoods, sandalwood; very little rain, and an average temperature of 76.

Virgin Islands

Population: 24,889.

Area: 149 square miles.

Capital and Leading City: Charlotte Amalie.

Geographic Features: Lying east of Puerto Rico between the Atlantic Ocean and the Caribbean Sea, the Virgin Islands comprise three main islands—St. Thomas, St. Croix, and St. John as well as about 50 smaller ones, and are rugged and elevated but have no mountains of importance.

History: Discovered by Columbus in 1494, the Virgin Islands were a Danish possession for 245 years with the exception of two periods (1801–02 and 1807–15) when they were captured by the British. In 1917 the United States purchased them from Denmark for \$25,000,000.

Industries: Agriculture, mainly sugar and bay leaves for the distilling of bay oil; a rum distillery and two sugar mills are the principal manufacturing industries.

Interesting Features: 5,000 acres of sugar cane, bi-weekly passenger and freight service in normal times from New York, air mail service twice each week, 18 public schools.

American Samoa

Population: 12,908.

Area: 76 square miles.

Capital and Leading City: Pago Pago.

Geographic Features: Located in the Pacific Ocean 2,263 miles southwest of Hawaii, American Samoa comprises

the islands of Tutuila, Aunu'u, Ofu, Tau, and Olosega as well as Rose Island, a coral atoll.

History: Acquired by the United States from Great Britain and Germany by virtue of a treaty in 1900, American Samoa was made a naval station, and the building of a naval air base was begun in 1940.

Guam

Population: 22,290.

Area: 206 square miles.

Capital and Leading City: Agaña.

Geographic Features: Located in the Pacific Ocean 1,600 miles west of Manila, Guam is mountainous in the south and traversed by a low ridge of hills near the central line, while in the west Orote Peninsula extends into the ocean.

History: Discovered in 1521 by Magellan, Guam was occupied by Spaniards in 1586 and remained a Spanish possession until 1898 when it was acquired by the United States as a result of the war with Spain. Guam was captured by the Japanese in 1941 and liberated by American forces in 1944.

Industries: Agriculture, mainly coconut oil, copra, rice, corn, coffee, sweet potatoes, pineapples, citrus fruits, bananas, limes, mangoes, papayas, cocoa, tobacco, breadfruit, cassava, alligator pears, sugar cane; cattle and water buffaloes are raised. Lumber and sugar are manufactured.

Interesting Features: Guam has been made a naval station with a strong government radio station.

BIOGRAPHIES OF THE PRESIDENTS AND THEIR WIVES

George Washington was born in 1732 at Wakefield, Va., 50 miles below Mount Vernon, son of Augustine Washington, a prosperous planter. His parents moved to Mount Vernon while he was a child. He had little more than an elementary education and became a surveyor at the age of 17.

His military career began when he joined the Virginia militia. His first experience of actual warfare was in the French and Indian War. He was aide-camp to General Braddock in 1755, and three years later took part in the expedition that captured Fort Duquesne, where Pittsburgh now stands. In 1759 he married Martha Custis, a wealthy young widow.

His political career began when he became a member of the Virginia House of Burgesses and went as a delegate to the First and Second Continental Congresses.

On the outbreak of the Revolutionary War Washington was unanimously elected commander-in-chief of the American forces. He took command of the army at Cambridge, Mass. Then followed the disasters of Long Island and of White Plains; the retreat through New Jersey; the victory of Princeton; the reverse at Brandywine; the terrible winter at Valley Forge; the drawn battle of Monmouth; and the final surrender of Cornwallis at Yorktown in 1781.

Washington was president of the national convention that framed the Federal Constitution in 1787. A year later he was unanimously elected first president of the United States and inaugurated in New York City. His

cabinet included Thomas Jefferson (secretary of state) and Alexander Hamilton (secretary of the treasury). In 1792 Washington was unanimously re-elected president.

Washington's "farewell address," with its warning against entangling alliances, was issued in 1796. He spent his last years in Mount Vernon, and died and was buried there in 1799.

Martha Custis Washington was born in 1731 of Welsh descent, and died in 1802. According to biographers she was "amiable in character and lovely in person." In 1749 she had married Col. Daniel Parke Custis, a wealthy Virginia planter. He died in 1757. At the time of her marriage to Washington in 1759 she had two children, Martha and John. Two of her grandchildren, Eleanor Parke Custis and George W. Parke Custis, were later adopted by Washington.

John Adams was born in 1735 in Braintree (now Quincy), Mass., son of a farmer. He was graduated from Harvard and practiced law in Boston. His political career began when he was chosen a member of the Massachusetts legislature in 1770. He was a delegate to the Continental Congresses and resolutely championed the movement for national independence at a time when the majority of delegates were lukewarm. He was one of the signers of the Declaration of Independence.

In 1778 Adams was sent as commissioner to France. During the following decade he represented American interests in Europe. One of his major achievements, in association with Ben-

jamin Franklin and John Jay, was the negotiation of a treaty with England.

In 1788, soon after his return from England he was elected vice president of the United States. In 1796 he was elected president. Thomas Jefferson, though of a different party, was elected vice president. During his term of office Adams was beset by many troubles. The Federalist party, to which Adams belonged, was on the defensive. Hamilton opposed Adams' policies at many points, notably in the French crisis of 1798. Jefferson was in favor of western expansion, which the Federalists opposed.

Adams was the first president to occupy the White House. He was a Unitarian. He and Jefferson died on the same day—July 4, 1826, the 50th anniversary of the Declaration of Independence.

Abigail Smith Adams was born in 1744 and died in 1818, daughter of a Congregational minister in Weymouth, Mass. She married Adams in 1764, and they had three sons and two daughters. She has won fame in her own right by reason of her lively and well-written letters to her husband during his absences in Washington and in Europe.

Thomas Jefferson was born in 1743 of Welsh ancestry in Shadwell, Va., son of a rich farmer. He graduated from the College of William and Mary and was admitted to the bar in 1767. Politics was his main interest. He was a writer, not an orator. With Washington he served in the Virginia legislature and the Continental Congresses. In 1776 he drafted the Declaration of Independence. Three years later he succeeded Patrick Henry as governor of Virginia. In 1785 he became U.S. minister to France. Jefferson served under Washington as secretary of state and under Adams as vice president. Jefferson was a Republican. Though the names of the parties have changed, Jefferson is regarded by the Democrats

of today as the founder of their party, and Hamilton is honored by the Republicans in much the same way. The election of 1800, in which Jefferson and Aaron Burr were both candidates for the presidency and received the same number of electoral votes, passed to the House of Representatives and, after 36 ballots, was resolved in Jefferson's favor. In 1804 he was re-elected. Jefferson was the first president to be inaugurated in Washington, D.C.

Jefferson as president waged successful war against the Barbary pirates in North Africa; negotiated the purchase of Louisiana from Napoleon; and organized the Lewis and Clark expedition into western America. His last years were devoted to the foundation of the University of Virginia. He was not affiliated with any religious denomination. He died in 1826 and was buried on his estate at Monticello.

Martha Skelton Jefferson was born in 1748 and died in 1782, daughter of a wealthy lawyer. She married Bathurst Skelton, but was widowed before she was 20. Her marriage to Jefferson took place in 1772. Of their six children only two daughters lived beyond infancy.

James Madison was born in 1751 at Port Conway, Va. He was graduated from Princeton and was admitted to the bar. In 1777 he was elected to the first Virginia state assembly, and three years later he represented his state in the Continental Congress. He has been called the father of the Federal Constitution because he was the author of the resolution in the Virginia legislature that led to the national convention of 1787 which framed the Constitution, and because he led in the actual writing of the document.

Madison was elected to the first House of Representatives and was prominent in bringing about the adoption of the first ten amendments to the Constitution known as the Bill of

Rights. He had been a Federalist, but gradually drew away from his party and allied himself with the Republicans. In 1801, after Jefferson became president, Madison entered his cabinet as secretary of state. Seven years later he was elected president. He lost some of his followers during the War of 1812, when the city of Washington was subjected to the humiliations of British invasion, but he was re-elected at the end of his first term. In 1817 he retired to Montpelier, where he died and was buried in 1836.

Dorothy Todd Madison was born in 1768 of English, Irish, and Scotch descent in what is now Guilford County, N.C. Her mother was a cousin of Patrick Henry. Her first husband was John Todd, a Pennsylvania lawyer and Quaker, who died in 1793 and left her one son. She married Madison in 1794. They had no children. "Dolly" Madison was celebrated for her beauty and social accomplishments.

James Monroe was born in 1758 of Scotch ancestry in Westmoreland County, Va. He attended William and Mary College, but soon, with teachers and students, among the latter John Marshall, left and joined the Revolutionary army under Washington. He was wounded at Trenton, N.J.

Under Jefferson's guidance Monroe studied law as well as politics. For a while he practiced law at Fredericksburg, Va. When he chose a political career he advanced rapidly. He was governor of his state in 1792; minister to France in 1803; minister to England in the same year; and headed a diplomatic mission to Spain in 1804.

In 1811 he entered the cabinet of President Madison as secretary of state. Five years later he was elected president. In 1820 he was re-elected. During his second term the Monroe Doctrine, which forbids European aggrandizement in the Americas, was promulgated. He died in 1831.

Elizabeth Kortright Monroe was born in 1768 and died in 1830, daughter of a former captain in the British army. She married Monroe in 1786. They had two daughters.

John Quincy Adams was born in 1767 in Quincy, Mass., son of President John Adams. He accompanied his father on diplomatic missions to France and Holland and received early schooling there, but returned to America to graduate from Harvard. For a while he taught at Harvard. Following his father's example he served in diplomatic posts in Europe. As U.S. minister to Russia in 1812 he witnessed Napoleon's invasion. Three years later he was one of the five negotiators of the Treaty of Ghent which terminated the War of 1812. From 1815 to 1817 he was minister to England.

Returning to the United States, he served as secretary of state under President Monroe, negotiated the Florida purchase, and announced the Monroe Doctrine, which Adams himself, rather than the president, formulated. On Monroe's retirement from office a four-cornered contest, involving Adams, Andrew Jackson, Henry Clay, and William H. Crawford, resulted in Adams' election. Clay became his secretary of state.

Adams was the only president to take a lesser public office after leaving the White House. He had been a Federalist, then a Republican, later a Whig, and now joined the party of the abolitionists. From 1831 until the year of his death he led in the fight against slavery. He was ardent in support of scientific knowledge and laid foundations for the Smithsonian Institution as a government undertaking. He was a Unitarian. He died in 1848.

Louise Catherine Johnson Adams was born in 1775 and died in 1852. She married Adams in London in 1797 and was his companion on diplomatic journeys. They had three sons and one

daughter. Charles Francis Adams, the third son, was minister to England during the Civil War.

Andrew Jackson was born in 1767 of Irish ancestry in a pioneer settlement on the North Carolina-South Carolina line. He studied law; practiced in Nashville; helped to frame the constitution of Tennessee; served in Congress; and in 1798 resigned to become a Tennessee supreme court judge. He married Rachel Donelson before she secured a legal divorce from her first husband, and although the ceremony was subsequently repeated they were both criticized. Jackson fought several duels, in one of which he killed Charles Dickinson and was himself wounded.

His military career began when, as a boy of 13, he served under Sumter in the Revolutionary War. In 1812 "Old Hickory," as he was called, headed a Tennessee regiment against the British. A year later he won decisive victories over the Creek Indians. In 1815 he captured Pensacola, the British base in Florida, and moved on to New Orleans.

After Spain had ceded Florida to the United States, Jackson was made governor of the new territory. In 1828 he was elected president of the United States as what we would now call a Democrat, and in 1832 he was re-elected. Jackson accepted the slogan: "To the victor belong the spoils." He brought to his presidential duties a dramatic, almost a turbulent, spirit. He threw his influence on the side of the frontiersmen and the middle class against the moneyed interests, and he drove the second Bank of the United States out of existence. One of his acts as president was to send troops to South Carolina in order to stifle a budding inclination on the part of that state to nullify the national tariff laws. Jackson was a Presbyterian and a Mason. In 1837 he retired to his home,

the Hermitage, near Nashville, where twelve years later he died and was buried.

Rachel Robards Jackson was born in 1767 and died in 1828. She is said to have been an excellent horsewoman and an expert dancer. Her first husband was Capt. Lewis Robards, who divorced her. She married Jackson in 1794 and was a devoted wife for nearly 40 years.

Martin Van Buren was born in 1782 of Dutch ancestry in Kinderhook, N.Y., son of a farmer and tavern keeper. He studied law and was early attracted to politics, mounting the political ladder step by step. After serving terms in the N.Y. state senate and in the U.S. Senate, he became governor of New York. In 1829 he entered the cabinet of President Jackson as secretary of state. He became vice president of the United States in 1832, and was elected president four years later. Van Buren supported Jackson and opposed John C. Calhoun in the nullification controversy. He at first opposed, later supported, Abraham Lincoln. He died in 1862.

Hannah Hoes Van Buren was born in 1783 and died in 1819. She married Van Buren in 1807 and had four sons.

William Henry Harrison was the son of Benjamin Harrison, signer of the Declaration of Independence, and grandfather of Benjamin Harrison, 23rd president of the United States. He was born in 1773 in Berkeley, Va. He studied medicine, but left his studies to fight against western Indians and Canadian English. In 1801 he was governor of the territory of Indiana. He defeated the Indians at Tippecanoe, on the Wabash River, and, by the victory of Commodore Oliver Hazard Perry on Lake Erie, was enabled to pursue and defeat the British forces in Canada. After 1816 Harri-

son's career was dominantly political. The newly formed Whig party, which had grown from a fusion of national Republicans and other elements opposed to the Democrats, and which tried unsuccessfully to make Harrison president in 1836, went on to victory in 1840 with the slogan, "Tippecanoe and Tyler too." Harrison was the first Whig president. He died in 1841, a month after his inauguration. He was an Episcopalian.

Anna Symmes Harrison was born in 1775 in Morristown, N.J., and died in 1864, daughter of a colonel in the Continental army. She married Harrison in 1795, and they had six sons and four daughters.

John Tyler was born in 1790 in Greenway, Va., son of a governor of Virginia. He was graduated from William and Mary College; was admitted to the bar; was elected to the Virginia legislature five times in succession; became governor of Virginia in 1825 and U.S. senator in 1827. Tyler was elected vice president in 1840 on the Whig ticket under President Harrison, but when Harrison died Tyler broke with the party that had elected him. All of the members of his cabinet, except Daniel Webster who was then engaged in negotiating a treaty with Great Britain concerning the boundary line between the United States and Canada, resigned, and a year later Webster followed. High spots in the Tyler administration were the completion of the Webster-Ashburton treaty, the passing of a protective tariff law, and the annexation of Texas. With civil war imminent, Tyler gave his support to the Confederate cause. Tyler was an Episcopalian. He died in 1862.

Letitia Christian Tyler, a Virginian, Tyler's first wife, was born in 1790 and had seven children. She died in the White House in 1842.

Julia Gardiner Tyler, Tyler's second wife, who came from New York,

was born in 1820 and also had seven children. The second Mrs. Tyler was a Roman Catholic. She died in 1889.

James Knox Polk was born in 1795 of Scotch-Irish ancestry in Mecklenburg County, N.C. He was admitted to the bar in 1820, and served as speaker in the 24th and 25th Congresses. After 14 years in Congress he was elected governor of Tennessee in 1839. Five years later he and Henry Clay were rival candidates for the presidential nomination. Polk was a Democrat and Clay was a Whig, and the Democrat won. During his term the Oregon boundary controversy with England was settled, and a dispute regarding the boundary of Texas led to the invasion of Mexico and to the acquisition of California and New Mexico. Polk was a Methodist. He died in 1849.

Sarah Childress Polk was born in Tennessee in 1803 and died in 1891. She was educated in a Moravian school. She married Polk in 1824.

Zachary Taylor was born in 1784 in Orange County, Va. His father, an officer in the Revolutionary War, was one of the first settlers of Louisville, Ky., whither Zachary was taken in early childhood. Taylor at 23 entered the army; fought the Indians along the Wabash and in Florida; and took an active part, with General Winfield Scott, in the invasion of Mexico. Taylor was elected president of the United States on the Whig ticket in 1848, but died 16 months after his inauguration.

Margaret Smith Taylor was born in 1788 in Calvert County, Md., and died in 1852. She married Taylor in 1810, and they had one son and five daughters. Her second daughter, Sarah, became the wife of Jefferson Davis.

Millard Fillmore was born in 1800 in Cayuga County, N.Y. He was reared on a farm; apprenticed to a clothier;

taught in a public school; and studied law. After serving in the state legislature and in the 23rd, 25th, 26th, and 27th Congresses he was elected vice president of the United States and became president on the death of General Taylor. He was closely associated with Clay and Webster, and tried to avert violent conflict on the slavery question by the "compromise measures" of 1850. His administration was marked by the opening of diplomatic relations with Japan as a result of Commodore Matthew Calbraith Perry's expedition. He was a Unitarian. He died in 1874.

Abigail Powers Fillmore, Fillmore's first wife, was born in 1798 and died in 1853, daughter of a Baptist clergyman. For a while she taught school. She married Fillmore in 1826, and they had one son and one daughter.

Carolina McIntosh Fillmore, Fillmore's second wife, was born in 1813 and died in 1881. She was the widow of an Albany, N.Y., merchant when she married Fillmore in 1858.

Franklin Pierce was born in 1804 in Hillsboro, N.H., son of a governor of the state. He was graduated from Bowdoin College and was admitted to the bar. After serving in the legislative bodies of his state and nation and as brigadier general in 1847 in the war against Mexico, he was brought forward at the Democratic National Convention in Baltimore in 1852 as a compromise candidate for the presidency. His election followed. Pierce was a vigorous expansionist, but failed to take a positive stand on the slavery question.

Jane Means Appleton Pierce was born in 1806 and died in 1863, daughter of a president of Bowdoin College. She married Pierce in 1834, and they had three sons.

James Buchanan was born in 1791 of Scotch descent near Mercersburg,

Pa. After serving in the state legislature and in Congress he became minister to Russia under President Jackson. Later he was secretary of state under President Polk. He was elected to the presidency on the Democratic ticket in 1856. During his term he carried forward the expansionist policies of his predecessor, attempting to buy Cuba and to extend the boundaries of the United States. His aim, in the rapidly developing conflict over slavery, was to preserve the "sacred balance" between free and slave-holding states.

Buchanan was the only bachelor in the long line of American presidents.

Abraham Lincoln was born in 1809 of English ancestry in a log cabin in Hardin (now Larue) County, Ky. His father, Thomas, was a migratory carpenter and farmer, and his mother, Nancy Hanks, was of humble parentage. When Lincoln was seven years old, the family moved to Indiana. At the age of 21 he was in Illinois helping to split rails and clear the forest. During the next few years he carried farm produce by water to New Orleans and sold it; operated a ferryboat across the Ohio River; kept a tavern and general store in New Salem; served in the Illinois legislature; and practiced law in Springfield. He came into national prominence when he was nominated by the newly formed Republican party to oppose Stephen A. Douglas in the senatorial race. The burning political issue of the day was slavery; and Lincoln, in a series of debates with his opponent, carried discussion of the issue on to a high level. He was not an abolitionist, but he hated slavery and opposed its extension.

The election of Lincoln as president in 1860 was in part due to the factional disputes of his opponents. He had hardly been inaugurated before Fort Sumter was fired on and the Civil War began. His Emancipation Proclamation followed the somewhat dubious

military victory in 1862. His Gettysburg Address was made at the dedication of the soldiers' cemetery at Gettysburg in 1863.

Lincoln was shot by John Wilkes Booth, a fanatic of secession, while attending a theatrical performance at Ford's Theatre, Washington, on the night of April 4, 1865. He died the next morning. His assailant fled across the Potomac River and was himself fatally shot a few days later. Lincoln was buried at Springfield, Ill. He never formally joined a religious denomination.

Mary Todd Lincoln was born in Lexington, Ky., in 1818, daughter of a pioneer settler. She was carefully educated. Lincoln and Mary Todd had planned a wedding in January, 1841, but they quarreled and the marriage was postponed until November of the following year. Of the four Lincoln sons, William Wallace died in 1862 and Thomas ("Tad") in 1871. Edward Baker Lincoln, who was born in 1846, lived for only four years. Robert Todd Lincoln, born in 1843, studied law at Harvard; served in the Civil War; was secretary of war in the Garfield cabinet and later minister to Great Britain; he became president of the Pullman Palace Car Company.

After Lincoln's assassination Mrs. Lincoln was bitterly attacked in Congress. She spent some time in a mental sanatorium in 1875. She died in Springfield in 1882.

Andrew Johnson was born in 1808 in Raleigh, N.C. At the age of ten he was apprenticed to a tailor. Eight years later he moved to Greenville, Tenn., and rose to leadership. He served in state and national legislatures, and although a lifelong Democrat did not resign from the Senate when Tennessee attempted to secede from the Union. Instead he led in organizing a loyal government in his state. He was thereupon nominated for

vice president on the Union-Republican ticket, and was elected. When Lincoln was assassinated in 1865, Johnson became president. During the next three years he was in constant conflict with Congress regarding reconstruction and post-war measures. He dismissed Secretary of War Stanton in violation of congressional legislation passed for the express purpose of making this dismissal illegal. In 1868 he was impeached; but the requisite two-thirds vote necessary for his removal was not forthcoming in the Senate sitting as the court of impeachment. He died in 1875.

Eliza McCordle Johnson was born in 1810 and died in 1876. By birth and education she was considered superior to her husband. She married Johnson in 1826 and had three sons and two daughters.

Ulysses Simpson Grant was born in 1822 on a farm in Point Pleasant, Ohio. He was graduated from West Point in 1843; served as an officer under Generals Zachary Taylor and Winfield Scott in the Mexican War; and resigned from the army in 1854. For several years he engaged unsuccessfully in small businesses. At the outbreak of the Civil War he drilled volunteers, and was commissioned colonel of the 21st Illinois regiment. In 1862, after his capture of Fort Donelson, he was made a major general. He captured Vicksburg on July 4, 1863; won the battle of Chattanooga in November of the same year; and forced the surrender of Robert E. Lee at Appomattox, Va., in April, 1865. In 1866 Congress commissioned him general of the army.

Grant was elected president in 1868 on the Republican ticket, and was re-elected four years later. The radical Republicans were in the saddle, and their reconstruction policies, to which Grant gave his support, favored the northern mercantile and industrial

classes; created a solid South; and kept alive hatred between the two sections. Legislation was influenced by disreputable financiers and politicians, and two of Grant's cabinet members became involved in serious scandals.

At the conclusion of his second term Grant retired from politics and made a tour of the globe. He soon lost most of his money in a private banking business, in which one of his sons was a partner. Thereupon he wrote a book of personal memoirs in the hope of recouping the family fortunes. He died in 1885, a few days after the manuscript was published, and is buried in Grant's Tomb overlooking the Hudson River at New York City.

Julia B. Dent Grant was born in 1826 and died in 1902, daughter of a St. Louis judge. She married Grant in 1848. There were three sons and a daughter, Nellie. The last named married Algernon Sartoris of London in the White House in 1874.

Rutherford Birchard Hayes was born in 1822 of Scotch ancestry in Delaware, Ohio. He attended Kenyon College and Harvard; served as a major general in the Civil War; and was governor of Ohio three times. In 1876 he was the Republican candidate for the presidency in a contest which resulted in the disputed Hayes-Tilden election. The electoral commission ruled in his favor by a narrow majority. His administration was largely concerned with post-war problems. He withdrew federal troops from Louisiana and South Carolina, and tried to heal the wounds inflicted by the Civil War. He advocated civil service reform and "hard" money. He showed no interest in renomination.

Lucy Ware Webb Hayes was born in 1831 and died in 1889. She married Hayes in 1852 and they had seven sons and one daughter. She was a stanch Methodist and prohibited wine at White House banquets.

James Abram Garfield was born in 1831 of English and French Huguenot descent on a farm in Orange, Ohio. He had little more than an elementary education. He worked on a boat on the Ohio canals; did carpentry; was baptized in youth a Campbellite into the fold of the "Disciples," and for four years (1857-1861) was president of an institute at Hiram, Ohio, teaching the doctrines of his sect. He was admitted to the bar in 1860; served as major general in the Civil War; and resigned from the army in 1863 to take a seat as a Republican in the House of Representatives. In politics he was a conservative, following his party leaders' stern program of reconstruction in the South, and turning a deaf ear to the arguments of civil service reformers. He was nominated for president as a compromise candidate in 1880, and after his election his life was made a nightmare by the importunities of office seekers. In 1881, one of these, Charles J. Guiteau, shot him in the Baltimore and Potomac Railway Depot in Washington. He died in Elberon, N.J., from the effects of the wound.

Lucretia Rudolph Garfield was born in 1832 in Hiram, Ohio, and married Garfield while he was president of the Disciple college. They had four sons and one daughter. One of the sons, Harry, a lawyer, became president of Williams College. Another, James, also a lawyer, was secretary of the interior under Theodore Roosevelt.

Chester Alan Arthur was born in 1830 in Fairfield, Vt. He was graduated from Union College, Schenectady, and was admitted to the bar in 1854. When the Civil War broke out, he helped to organize troops for service, and served as quartermaster general in New York State. In 1871 he was collector of the port in New York. A burning issue of the time was civil service reform, and Arthur, when he be-

came president after the assassination of Garfield, helped to lay the foundations for an enduring civil service system. He was an Episcopalian. He died in 1886.

Ella Lewis Herndon Arthur was born in 1837 and died in 1880. She married Arthur in 1859. They had two sons and one daughter.

Grover Cleveland was born in 1837 in Caldwell, N.J., son of a Presbyterian minister. He studied law in Buffalo, became mayor of the city in 1881 and governor of the state in 1882. In 1884 he was elected president—the first Democratic president since the Civil War. Cleveland supported civil service reform, and asked each Congress for downward revision of the tariff. When elected for a second time in 1892 he forced England to submit the Venezuela boundary question to arbitration. He died in 1908.

Frances Folsom Cleveland was born in 1864. She married President Cleveland at the White House in 1886. They had three daughters and two sons. Cleveland's widow married Thomas Jex Preston, Jr., a professor of archeology, in 1913.

Benjamin Harrison was born in 1833 in North Bend, Ohio, son of a farmer. He was admitted to the bar in 1853 and practiced law in Indianapolis. During the Civil War he served as colonel of an Indiana regiment. In 1881 he was elected from Indiana to the U.S. Senate. Seven years later he was elected president. During his term he supported high tariff legislation and promoted Pan-American unity. In 1900 he was attorney for the Republic of Venezuela in the boundary dispute which had arisen between Venezuela and Great Britain. He was an elder in the Presbyterian church. He died in 1901.

Caroline Lavinia Scott Harrison was born in 1832 of Scotch ancestry and

died in 1892. She married Harrison in 1852. They had a son and a daughter.

William McKinley was born in 1843 of Scotch-Irish descent in Niles, Ohio. He enlisted as a private and fought in the Civil War. In 1867 he was admitted to the bar and practiced law in Canton, Ohio. He entered Congress in 1876 and came into prominence as a champion of the protective tariff. In close association with the politician Mark Hanna he was twice elected governor of Ohio. He was also twice elected president. His second administration was marked by American victory in the Spanish-American War and by acquisition of the Philippine Islands. McKinley was assassinated by an anarchist, Leon Czolgosz, in 1901 at the Pan-American Exposition in Buffalo. He was a Methodist and a Mason.

Ida Saxton McKinley was born in 1847 in Canton, Ohio, daughter of a banker. She was a cashier in her father's bank when she married McKinley in 1871. They had two daughters, both of whom died in childhood. Mrs. McKinley died in 1907.

Theodore Roosevelt was born in 1858 of Dutch descent in New York City. He was an enthusiastic reader and student, and wrote many books. He was graduated from Harvard in 1880; traveled abroad; served from 1882 to 1884 in the New York state assembly; and lived for two years on a North Dakota ranch. In 1886 he was an unsuccessful candidate for mayor of New York. From 1897 to 1898 he was assistant secretary of the navy. He resigned to organize, with Leonard Wood, a surgeon in the U.S. Army, a cavalry regiment, known as the Rough Riders, in the Spanish-American War. He fought in Cuba. At the close of the war he was elected governor of New York State. Two years later he was elected vice president; and on the

death of President McKinley in 1901 he became president. He was re-elected in 1904.

Roosevelt's administrations were notable for the vigor with which he handled both foreign and domestic affairs. He received the Nobel peace prize in 1906 as a result of his mediation in the Russo-Japanese War. With the help of his secretary of state, John Hay, he maintained the "open door" policy in China. Construction of the Panama Canal was started during his administration. At home he assailed "big business" and "malefactors of great wealth," and supported the Sherman Anti-trust Act.

In 1909-1910 he hunted wild animals in East Africa and made a speaking tour through European capitals. On his return he split the Republican party and unsuccessfully ran for president on the Progressive (Bull Moose) ticket. In 1913-1914 he visited and explored South America. He was a member of the Dutch Reformed Church and a Mason. He died in 1919.

Alice Hathaway Roosevelt, Roosevelt's first wife, was born in 1861 in Boston and died in 1884. She married Roosevelt in 1880. They had one daughter, Alice, who in 1906 married Nicholas Longworth in the White House.

Edith Kermit Carow Roosevelt, Roosevelt's second wife, was born in 1861. She married Roosevelt in London in 1886. They had four sons and one daughter. Quentin, an aviator in France during the First World War, was killed in action. Theodore, Jr., was assistant secretary of the navy under Harding and Coolidge; was later appointed governor of Puerto Rico and, in 1932, governor general of the Philippines; and died in France during the Second World War.

William Howard Taft was born in 1857 in Cincinnati, son of Alphonso Taft, who was secretary of war and

later attorney general in Grant's cabinet. He was graduated from Yale and from the Cincinnati Law School and was admitted to the bar in 1880. After holding positions as attorney, solicitor, and judge, he became president of the U.S. Philippine Commission and visited the Philippine Islands, where he laid the foundations for American government. He was secretary of war under Theodore Roosevelt and was elected president in 1908. He owed his election largely to Roosevelt's influence, but lacked the magnetism and dramatic force of his predecessor. The differences between the two in matters involving the tariff, trust regulation, and conservation of natural resources widened into an open quarrel. In the three-cornered presidential election that ensued, Woodrow Wilson, the Democratic candidate, was victorious. For several years thereafter Taft was professor of law at Yale. In 1921 he was appointed chief justice of the U.S. Supreme Court. He was a Unitarian and a Mason. He died in 1930.

Helen Herron Taft was born in 1861 of Irish ancestry, and died in 1943. Her father was a law partner of Rutherford B. Hayes. She married Taft in 1886, and they had two sons and a daughter. One son, Robert Alphonso Taft, was elected to the U.S. Senate.

Woodrow Wilson was born in 1856 in Staunton, Va., son of a Presbyterian minister. He was graduated from Princeton in 1879; practiced law in Atlanta, Ga.; and taught at Bryn Mawr College, Wesleyan University, and Princeton. He became president of Princeton in 1902 and served for 8 years. During this period he wrote a history of the American people and other books. In 1911 he abandoned education for politics and was elected governor of New Jersey. A year later he became president of the United States. He was re-elected in 1916. During his administrations a new financial

system was organized and federal reserve banks were established throughout the country. In foreign affairs his secretary of state, William Jennings Bryan, devoted himself to the negotiation of treaties intended to prevent war. As crises developed in Mexico after its revolution, Wilson dispatched marines to Vera Cruz and sent General Pershing in pursuit of Villa. The outbreak of the First World War soon overwhelmed all other problems, and Wilson on April 2, 1917 asked Congress to declare war on Germany.

In 1918, a few months before the German surrender, Wilson presented his Fourteen Points. He went to Paris as the head of an American delegation, breaking all American precedent. After long discussions at the Paris conference among Wilson, Lloyd George, Clemenceau, and other representatives of foreign powers, the Versailles Treaty was formulated and the League of Nations was launched. Both treaty and league were rejected by the U.S. Senate. After a strenuous tour in which Wilson carried the issue to the country he suffered a physical breakdown.

Wilson received the Nobel peace prize in 1919. He was a Presbyterian. He died in 1922 and is entombed in the Protestant Episcopal cathedral in Washington.

Ellen Louisc Axson Wilson, Wilson's first wife, was born in 1860 in Savannah, Ga., daughter of a Presbyterian minister. She died in 1914. She married Wilson in 1885, and they had three daughters. Of these the second, Eleanor, became the second wife of William G. McAdoo, secretary of the treasury under Wilson.

Edith Galt Wilson, Wilson's second wife, was born in 1872 in Wytheville, Va. She was the widow of Norman Galt, a Washington jeweler, when she married Wilson in 1915. She accompanied Wilson on all his travels and was with him at the Paris peace conference.

Warren Gamaliel Harding was born in 1865 on a farm in Corsica, Ohio. He studied at Ohio Central College and in 1884 became associated with the Daily Star at Marion. Later he owned and edited the paper. In 1920 he was elected president on the Republican ticket by an immense majority. He pledged himself to the restoration of "normalcy" after the First World War, and he signed a separate treaty with Germany. Early in his administration the Limitation of Armaments conference was held, by his invitation, in Washington. Scandals developed during his term, and two of his cabinet appointees were brought to the bar of justice. He died in San Francisco in 1923 after making a tour through Alaska. He was a Baptist and a Mason.

Florence Kling Harding was born in 1860 in Marion, Ohio, daughter of a banker. She married Henry De Wolfe in 1880 and they were later divorced. The Hardings were married in 1891 and had no children. She died in 1924.

Calvin Coolidge was born in 1872 in Plymouth, Vt., son of a farmer and storekeeper. He was graduated from Amherst and practiced law in Northampton, Mass. In 1910 he was mayor of Northampton. Nine years later he was governor of Massachusetts and came into national prominence at the time of the Boston police strike. Elected vice president in 1920, he became president on Harding's death in 1923. In 1924 he was elected president for the full term. His administration was marked by economy and conservatism during a period of industrial prosperity. He was a Congregationalist. He died in 1933.

Grace Goodhue Coolidge was born in 1879. She was a teacher in the Clark School for the Deaf at Northampton when she met and married Coolidge in 1905. They had two sons, one of

whom, Calvin, died while his father was president.

Herbert Clark Hoover was born in 1874 of Swiss ancestry in West Branch, Iowa. He entered Stanford University in 1891 and specialized in engineering. From 1895 to 1914 he engaged in mining and engineering activities on all the five continents of the globe. At the outbreak of the First World War he became chairman of the American Relief Committee in London. Subsequently he was head of the Commission for Relief in Belgium. In 1917-1919 he was U.S. food administrator, and in 1921-1928 secretary of commerce under Harding and Coolidge. Elected to the presidency on the Republican ticket in 1928, he carried out a conservative policy. His term was distinguished by a great expansion of the Commerce Department. He initiated national engineering enterprises such as Boulder Dam. In 1932 he created the Reconstruction Finance Corporation, a government-owned institution intended to stimulate industry by loans unobtainable elsewhere. His administration was criticized for failure to meet the problems of the depression of the early thirties. After the election of Franklin D. Roosevelt, Hoover retired to his home at Palo Alto, California. He is a Quaker.

Lou Henry Hoover was born in 1875 and died in 1944. She attended Stanford University and married Hoover in Monterey, California, in 1899. She had two sons.

Franklin Delano Roosevelt was born in 1882 of Dutch ancestry in Hyde Park, N.Y. He was a fifth cousin of President Theodore Roosevelt. He was graduated from Harvard and Columbia Law School. His first public office was that of state senator. He was assistant secretary of the navy under Wilson. In 1920 he was nominated for vice president on the Democratic ticket

with Gov. James M. Cox of Ohio. After his defeat he practiced law in New York City. In 1928 he was elected governor of New York. Four years later he was re-elected.

In 1932 during a period of extreme financial and industrial depression Roosevelt was elected president. He was re-elected in 1936, 1940, and 1944, and was the first president to be chosen for either a third or a fourth term.

Striking domestic reforms were initiated during his first terms. He laid the foundations for a "New Deal" by means of vast expenditures in behalf of the unemployed, through public works and by direct relief.

In 1937, with a Second World War on the horizon, Roosevelt called for the "quarantining of the aggressors." In 1940, when the entry of the United States into the war became inevitable, he signed the selective training and service act, the first peacetime compulsory training law in the history of the nation.

In the summer of 1941 President Roosevelt and Prime Minister Churchill took part in the Atlantic Charter conference "somewhere in the Atlantic."

After the Japanese attack on Pearl Harbor in December, 1941, Roosevelt became the active leader of the American forces; called for "unconditional surrender" of the axis powers at a conference with Churchill in French Morocco; went to an Anglo-American war conference at Quebec, Canada; and attended a second conference in North Africa, in which Mr. Churchill and Generalissimo Chiang Kai-shek of China participated. In 1943, at Teheran, Iran, the President, Mr. Churchill, and Premier Joseph Stalin of Russia agreed to "work together in the war and in the peace that will follow." A second meeting of the "Big Three" followed at Yalta in the Crimea in 1945. Shortly after his return from this meeting he suffered a

fatal brain hemorrhage and died on April 12 in Warm Springs, Georgia. He is buried at his home in Hyde Park, N.Y.

At the age of 39, Roosevelt was stricken with infantile paralysis. He fought his way back to health and helped to establish the Georgia Warm Springs Foundation to aid sufferers from this disease. He was an Episcopalian.

Anna Eleanor Roosevelt was born in 1884 in New York City, daughter of Elliott, younger brother of President Theodore Roosevelt. She taught in the Todhunter school for girls in New York City; has been active in educational, sociological, and political affairs; and has delivered public addresses in all parts of the country. Her newspaper column is widely read. She married Roosevelt in 1905, and they had five children—Anna Eleanor, James, Elliott, Franklin, and John. One son died in infancy.

Harry S. Truman (the *S* is merely an initial and does not stand for a name) was born on a farm near Lamar, Mo., on May 8, 1884. He was graduated from the Independence, Mo., high school in 1901 and applied for admission to the West Point Military Academy, but was rejected because of poor eyesight. Following his

graduation he held jobs in a drugstore, in the mail room of the *Kansas City Star*, and as a bank clerk in Kansas City. When the First World War broke out he went to France with an artillery battery of the Missouri National Guard. He served in the battle of St. Mihiel and the Argonne campaign. He held the rank of major at the time of his return to civilian life. Shortly after, he opened a haberdashery store in Kansas City, which failed. He then entered politics, becoming a judge in the Jackson County Court for two years. From 1926 to 1934 he was Presiding Judge of the Court. He served as U.S. Senator from Missouri from 1935 to 1945. In this office he achieved fame as the head of the Senate committee which investigated waste and inefficiency in the conduct of the production phase of the war. He was inaugurated as vice president in January, 1945. He was sworn in as president on April 12, a few hours after the death of Franklin D. Roosevelt.

Bess Wallace Truman was born in Kansas in 1885, the daughter of a farmer. She taught school for a time before marrying Truman in 1919. They have one daughter, Mary Margaret, born in 1924. Mrs. Truman served as her husband's secretary while he was Senator. They are Episcopalians.

ELECTORAL COLLEGE

While in fact the President of the United States is elected by the people of the country, the Constitution (Art. II, Sec. 1) provides for the indirect election of the Chief Executive. According to the Constitution, each state is to appoint electors equal in number to the sum of Senators and members of the House of Representatives to which it is entitled, who meet and vote for candidates for the Presidency. The votes are then sent to the President of

the Senate who, in the presence of both houses of Congress, counts them, and names the winning candidate for office.

All the states now recognize this procedure as a mere formality. The electors are chosen directly by the voters of the states. Actually, when voters cast their ballots for one of the candidates for the Presidency, they vote for one group of electors who usually belong to the same political party as the candidate for the Presi-

dency. Then, on some prescribed day, these electors cast their votes as provided in the Constitution. This body of electors has come to be known as the Electoral College. While there is no

law that would prevent an elector from casting his vote for the candidate of another party, there has been no instance of this in our history since the party system became firmly entrenched.

VICE PRESIDENTS OF THE UNITED STATES

	Name	Birthplace	Yr.	Took Office	Politics	Place of Death	Yr.
1	John Adams	Quincy, Mass.	1735	1789	Fed.	Quincy, Mass.	1826
2	Thomas Jefferson	Shadwell, Va.	1743	1797	Rep.	Monticello, Va.	1826
3	Aaron Burr	Newark, N. J.	1756	1801	Rep.	Staten Island, N. Y.	1836
4	George Clinton	Ulster Co., N. Y.	1739	1805	Rep.	Washington, D. C.	1812
5	Elbridge Gerry	Marblehead, Mass.	1744	1813	Rep.	Washington, D. C.	1814
6	Daniel D. Tompkins	Scarsdale, N. Y.	1774	1817	Rep.	Staten Island, N. Y.	1825
7	John C. Calhoun	Abbeville, S. C.	1782	1825	Rep.	Washington, D. C.	1850
8	Martin Van Buren	Kinderhook, N. Y.	1782	1833	Dem.	Kinderhook, N. Y.	1862
9	Richard M. Johnson	Louisville, Ky.	1780	1837	Dem.	Frankfort, Ky.	1850
10	John Tyler	Greenway, Va.	1790	1841	Dem.	Richmond, Va.	1862
11	George M. Dallas	Philadelphia, Pa.	1792	1845	Dem.	Philadelphia, Pa.	1864
12	Millard Fillmore	Summerhill, N. Y.	1800	1849	Whig	Buffalo, N. Y.	1874
13	William R. King	Sampson Co., N. C.	1786	1853	Dem.	Dallas Co., Ala.	1853
14	John O. Breckinridge	Lexington, Ky.	1821	1857	Dem.	Lexington, Ky.	1875
15	Hannibal Hamlin	Paris, Me.	1809	1861	Rep.	Bangor, Me.	1891
16	Andrew Johnson	Raleigh, N. C.	1808	1865	Rep.	Carter Co., Tenn.	1875
17	Schuyler Colfax	New York City, N. Y.	1823	1869	Rep.	Mankato, Minn.	1885
18	Henry Wilson	Farmington, N. H.	1812	1873	Rep.	Washington, D. C.	1875
19	William A. Wheeler	Malone, N. Y.	1819	1877	Rep.	Malone, N. Y.	1887
20	Chester A. Arthur	Fairfield, Vt.	1830	1881	Rep.	New York City, N. Y.	1886
21	Thos. A. Hendricks	Muskingum Co., Ohio	1819	1835	Dem.	Indianapolis, Ind.	1885
22	Levi P. Morton	Shoreham, Vt.	1824	1889	Rep.	Rhinebeck, N. Y.	1920
23	Adlai E. Stevenson	Christian Co., Ky.	1835	1893	Dem.	Chicago, Ill.	1914
24	Garrett A. Hobart	Long Branch, N. J.	1844	1897	Rep.	Faterson, N. J.	1890
25	Theodore Roosevelt	New York City, N. Y.	1858	1901	Rep.	Oyster Bay, N. Y.	1919
26	Chas. W. Fairbanks	Unionville Centre, Ohio	1852	1905	Rep.	Indianapolis, Ind.	1918
27	James S. Sherman	Utica, N. Y.	1855	1909	Rep.	Utica, N. Y.	1912
28	Thos. F. Marshall	No. Manchester, Ind.	1854	1913	Dem.	Washington, D. C.	1925
29	Calvin Coolidge	Plymouth, Vt.	1872	1921	Rep.	Northampton, Mass.	1933
30	Charles G. Dawes	Marietta, Ohio	1865	1925	Rep.		
31	Charles Curtis	Topeka, Kan.	1860	1929	Rep.	Washington, D. C.	1936
32	John Nance Garner	Red River Co., Tex.	1869	1933	Dem.		
33	Henry Agard Wallace	Adair County, Ia.	1888	1941	Dem.		
34	Harry S. Truman	Lamar, Mo.	1884	1945	Dem.		

VOTING QUALIFICATIONS OF THE STATES

General requirements: Minimum age, 21 (18 in Georgia); citizen of U.S.; not a convict; literacy; registration. Paupers are excluded in some states.

Residence Required

State	In State	In County	In Precinct	State	In State	In County	In Precinct
Alabama*	2 yrs.	1 yr.	3 mos.	Nevada	6 mos.	30 days	10 days
Arizona	1 yr.	30 days	30 days	New Hampshire	6 mos.	.....	6 mos.
Arkansas*	1 yr.	6 mos.	30 days	New Jersey	1 yr.	5 mos.	.....
California	1 yr.	90 days	40 days	New Mexico	1 yr.	90 days	30 days
Colorado	1 yr.	90 days	10 days	New York	1 yr.	4 mos.	30 days
Connecticut	1 yr.	6 mos.	.....	North Carolina	1 yr.	.....	4 mos.
Delaware	1 yr.	3 mos.	30 days	North Dakota	1 yr.	90 days	30 days
Florida	1 yr.	6 mos.	30 days	Ohio	1 yr.	30 days	5 days
Georgia	1 yr.	6 mos.	.....	Oklahoma	1 yr.	6 mos.	30 days
Idaho	6 mos.	30 days	.....	Oregon	6 mos.	.....	.....
Illinois	1 yr.	90 days	30 days	Pennsylvania	1 yr.	2 mos.	2 mos.
Indiana	6 mos.	60 days	30 days	Rhode Island	2 yrs.	6 mos.	.....
Iowa	6 mos.	60 days	10 days	South Carolina*	2 yrs.	1 yr.	4 mos.
Kansas	6 mos.	30 days	30 days	South Dakota	1 yr.	90 days	30 days
Kentucky	1 yr.	6 mos.	60 days	Tennessee*	1 yr.	6 mos.	.....
Louisiana	2 yrs.	1 yr.	3 mos.	Texas*	1 yr.	6 mos.	6 mos.
Maine	3 mos.	.....	1 day	Utah	1 yr.	4 mos.	60 days
Maryland	1 yr.	6 mos.	6 mos.	Vermont	1 yr.	3 mos.	3 mos.
Massachusetts	1 yr.	6 mos.	6 mos.	Virginia*	1 yr.	6 mos.	30 days
Michigan	6 mos.	20 days	20 days	Washington	1 yr.	30 days	10 days
Minnesota	6 mos.	.....	10 days	West Virginia	1 yr.	60 days	.....
Mississippi*	2 yrs.	1 yr.	1 yr.	Wisconsin	1 yr.	10 days	10 days
Missouri	1 yr.	60 days	60 days	Wyoming	1 yr.	60 days	10 days
Montana	1 yr.	6 mos.	.....			
Nebraska	6 mos.	40 days	10 days				

*Indicates that poll tax must be paid.

POPULAR VOTE FOR PRESIDENT, 1944, BY STATES

State	Total Vote	Democrat	Pct.	Republican	Pct.	Other	Pct.	Plurality
Alabama	244,743	198,918	81.3	44,540	18.2	1,285	0.5	154,378
Arizona	137,213	80,926	58.9	56,287	41.1	...	...	24,639
Arkansas	124,954	148,965	69.3	65,551	30.5	438	0.5	83,414
California	3,518,814	1,988,564	56.5	1,512,965	43.0	17,285	0.5	475,599
Colorado	505,039	234,331	46.4	268,731	53.2	1,977	0.4	34,400
Connecticut	831,993	435,146	52.3	390,527	46.9	6,320	0.8	44,619
Delaware	125,361	68,166	54.4	56,747	45.3	448	0.4	11,419
Florida	482,803	339,377	70.3	143,215	29.7	211	0.0	196,162
Georgia	328,111	268,187	81.7	56,506	17.2	3,418	1.5	211,681
Idaho	208,321	107,399	51.5	100,137	48.1	785	0.4	7,262
Illinois	4,036,061	2,079,479	51.6	1,939,314	48.0	17,268	0.4	140,165
Indiana	1,672,091	781,403	46.7	875,891	52.4	14,797	0.9	94,480
Iowa	1,052,601	499,876	47.5	547,267	51.0	5,458	0.5	47,391
Kansas	733,776	287,458	39.2	442,096	60.2	4,222	0.6	154,638
Kentucky	867,921	472,589	54.5	392,448	45.2	2,884	0.3	80,141
Louisiana	358,506	288,000	80.3	70,382	19.7	124	0.0	217,618
Maine	296,400	140,631	47.5	155,434	52.4	335	0.1	14,803
Maryland	609,419	316,138	51.9	293,281	48.1	...	...	22,857
Massachusetts	1,960,825	1,035,296	52.8	921,350	47.0	4,019	0.2	113,946
Michigan	2,205,217	1,106,899	50.2	1,084,423	49.2	13,895	0.6	22,476
Minnesota	1,126,159	589,864	52.4	527,416	46.8	8,879	0.8	62,448
Mississippi	172,379	160,792	93.3	11,587	6.7	...	...	149,205
Missouri	1,571,678	807,357	51.4	761,175	48.4	3,146	0.2	46,182
Montana	207,355	112,556	54.3	93,163	44.9	1,636	0.8	19,393
Nebraska	563,126	233,246	41.4	329,880	58.6	...	...	96,634
Nevada	54,234	29,623	54.6	24,611	45.4	...	...	5,012
New Hampshire	229,630	119,868	52.1	109,916	47.9	46	0.0	9,752
New Jersey	1,963,761	987,874	50.3	961,335	49.0	14,552	0.7	26,539
New Mexico	152,221	81,389	53.5	70,688	46.4	144	0.1	10,701
New York	6,311,930	3,304,238	52.4	2,987,647	47.3	20,045	0.3	316,591
North Carolina	789,554	527,399	66.6	262,155	33.2	...	...	265,244
North Dakota	220,171	100,144	45.5	118,535	53.8	1,492	0.7	18,391
Ohio	3,153,056	1,570,763	49.8	1,582,293	50.2	...	...	11,530
Oklahoma	720,973	401,549	55.7	319,424	44.3	...	...	82,125
Oregon	480,147	248,635	51.8	225,365	46.9	6,147	1.3	23,270
Pennsylvania	3,794,787	1,940,478	51.1	1,835,048	48.4	19,260	0.5	105,431
Rhode Island	297,948	174,431	58.5	123,517	41.5	...	...	50,914
South Carolina	103,375	90,601	87.6	4,610	4.6	6,164	7.9	85,991
South Dakota	232,073	96,711	41.7	135,362	58.3	...	...	38,651
Tennessee	510,692	308,707	60.5	200,311	39.2	1,674	0.3	108,396
Texas	1,150,343	821,605	71.4	181,425	16.6	137,313	12.0	630,180
Utah	247,979	150,088	60.5	97,891	39.5	...	...	52,197
Vermont	125,347	53,820	42.9	71,527	57.1	...	...	17,707
Virginia	388,485	242,276	62.4	145,243	37.4	966	0.2	97,033
Washington	856,328	486,774	56.8	361,689	42.2	7,865	1.0	124,885
West Virginia	715,596	392,777	54.9	322,819	45.1	...	...	69,958
Wisconsin	1,339,152	650,412	48.6	674,532	50.4	14,207	1.0	24,119
Wyoming	101,340	49,419	48.8	51,921	51.2	...	...	2,502
Totals	47,969,828	25,610,946	53.4	22,018,177	45.9	340,705	.7	3,592,769

UNITED STATES CONGRESS

The Congress of the United States is composed of two bodies, the Senate and the House of Representatives. Each state has 2 representatives in the Senate, making a total of 96 members. The presiding officer of the Senate is the Vice President of the United States. Election to the House of Representatives is on the basis of population, with 1 member to about 300,000 persons. The presiding officer of the House is the Speaker, who is elected by the members. Senators are elected for 6 years, members of the House for 2.

While strictly speaking both Senators and members of the House are members of Congress, the term "Congressman" or "Member of Congress" is used to designate members of the House.

The business of both houses is carried on through specialized committees, which must consider all bills introduced pertaining to a certain subject before they are presented to the entire chamber for consideration. A bill may be reported out of committee either favorably or unfavorably. In the great majority of cases, a bill which is re-

ported out of committee unfavorably is defeated by the entire body. A bill which is reported out favorably, however, must also go through the process of debate and voting. In recent years both houses have used committees not only to consider proposed legislation, but also to undertake special investigations.

The Seventy-ninth Congress, which came into existence on January 3, 1945, is composed of 96 Senators and 435 Congressmen. There are 38 Republicans, 57 Democrats, and 1 independent in the Senate, and 190 Republicans, 243 Democrats, and 2 independents in the House.

JUSTICES OF THE UNITED STATES SUPREME COURT

Name	Service		Born	Died
	Term	Yrs.		
John Jay, N. Y.	1789-1795	6	1745	1829
John Rutledge, S. C.	1789-1791	2	1739	1800
William Cushing, Mass.	1789-1810	21	1733	1810
James Wilson, Pa.	1789-1798	9	1742	1798
John Blair, Va.	1789-1796	7	1732	1800
Robert H. Harrison, Md.	1789-1790	1	1745	1790
James Iredell, N. C.	1790-1799	9	1751	1799
Thomas Johnson, Md.	1791-1793	2	1732	1819
William Paterson, N. J.	1793-1806	13	1745	1806
John Rutledge, S. C.	1795-1796	1	1739	1800
Samuel Chase, Md.	1796-1811	15	1741	1811
Oliver Ellsworth, Conn.	1796-1799	4	1745	1807
Bushrod Washington, Va.	1798-1829	31	1762	1829
Alfred Moore, N. C.	1799-1804	5	1755	1810
John Marshall, Va.	1801-1835	34	1755	1835
William Johnson, S. C.	1804-1834	30	1771	1834
Brockholst Livingston, N. Y.	1806-1823	17	1757	1823
Thomas Todd, Ky.	1807-1826	19	1765	1826
Joseph Story, Mass.	1811-1845	34	1779	1845
Gabriel Duval, Md.	1811-1836	25	1752	1844
Smith Thompson, N. Y.	1823-1843	20	1767	1843
Robert Trimble, Ky.	1826-1828	2	1777	1828
John McLean, Ohio	1829-1861	32	1785	1861
Henry Baldwin, Pa.	1830-1846	14	1779	1844
James M. Wayne, Ga.	1835-1867	32	1790	1867
Roger B. Taney, Md.	1836-1864	28	1777	1864
Philip P. Barbour, Va.	1836-1841	5	1783	1841
John Catron, Tenn.	1837-1865	28	1786	1865
John McKinley, Ala.	1837-1852	15	1780	1852
Peter V. Daniel, Va.	1841-1860	19	1785	1860
Samuel Nelson, N. Y.	1845-1872	27	1792	1873
Levi Woodbury, N. H.	1845-1851	6	1789	1851
Robert C. Grier, Pa.	1846-1870	24	1794	1870
Benj. R. Curtis, Mass.	1851-1857	6	1809	1874
John A. Campbell, Ala.	1853-1861	8	1811	1869
Nathan Clifford, Me.				
Noah H. Swayne, Ohio				
Samuel F. Miller, Iowa				
David Davis, Ill.				
Stephen J. Field, Cal.				
Salmon P. Chase, Ohio				
William Strong, Pa.				
Joseph P. Bradley, N. J.				
Ward Hunt, N. Y.				
Morrison R. Waite, Ohio				

Name	Service		Born	Died
	Term	Yrs.		
John M. Harlan, Ky.	1877-1911	34	1833	1911
William B. Woods, Ga.	1880-1887	7	1824	1887
Stanley Matthews, Ohio	1881-1889	8	1824	1889
Horace Gray, Mass.	1881-1902	21	1828	1902
Samuel Blatchford, N. Y.	1882-1893	11	1820	1893
Lucius Q. C. Lamar, Miss.	1888-1893	5	1825	1893
Melville W. Fuller, Ill.	1888-1910	22	1833	1910
David J. Brewer, Kan.	1889-1910	21	1837	1910
Henry B. Brown, Mich.	1890-1906	16	1836	1913
George Shiras, Jr., Pa.	1892-1903	11	1832	1924
Howell E. Jackson, Tenn.	1893-1895	2	1832	1895
Edward D. White, La.	1894-1910	16	1845	1921
Rufus W. Peckham, N. Y.	1895-1910	14	1838	1909
Joseph McKenna, Cal.	1898-1925	27	1843	1926
Oliver W. Holmes, Mass.	1902-1932	29	1841	1935
William R. Day, Ohio	1903-1922	19	1849	1923
William H. Moody, Mass.	1906-1910	4	1853	1917
Horace H. Lurton, Tenn.	1910-1914	5	1844	1914
Charles E. Hughes, N. Y.	1910-1916	6	1862	....
Willis Van Devanter, Wyo.	1911-1937	26	1859	1941
Joseph R. Lamar, Ga.	1910-1916	6	1857	1916
Edward D. White, La.	1910-1921	11	1845	1921
Mahlon Pitney, N. J.	1912-1924	12	1858	1924
Jas. C. McReynolds, Tenn.	1914-1941	26	1862	....
Louis D. Brandeis, Mass.	1916-1939	23	1856	1941
John H. Clarke, Ohio	1916-1922	6	1857	....
William H. Taft, Conn.	1921-1930	9	1857	1930
George Sutherland, Utah	1922-1938	16	1862	1942
Pierce Butler, Minn.	1922-1939	27	1866	1939
Edward T. Sanford, Tenn.	1923-1930	7	1865	1930
Harlan F. Stone, N. Y.	1925-1941	16	1872	....
Charles E. Hughes, N. Y.	1930-1941	11	1862	....
Owen J. Roberts, Penn.	1930-1945	15	1875	....
Benjamin N. Cardozo, N. Y.	1932-1938	6	1870	1938
Hugo L. Black, Ala.	1937-....	....	1886	....
Stanley F. Reed, Ky.	1938-....	....	1884	....
Felix Frankfurter, Mass.	1939-....	....	1882	....
William O. Douglas, Conn.	1939-....	....	1898	....
Frank Murphy, Michigan	1940-....	....	1893	....
Harlan F. Stone, N. Y.	1941-....	....	1872	....
James F. Byrnes, S. C.	1941-1942	1	1879	....
Robert H. Jackson, N. Y.	1941-....	....	1892	....
Wiley B. Rutledge, Iowa	1943-....	....	1894	....
Harold H. Burton, Ohio	1945-....	....	1888	....

Names in boldface type are Chief Justices.

CONSTITUTION OF THE UNITED STATES

PREAMBLE

We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquillity, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

ARTICLE I.

SECTION 1. All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

SEC. 2. The House of Representatives shall be composed of Members chosen every second Year by the People of the several States, and the Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature.

No Person shall be a Representative who shall not have attained the Age of twenty-five Years, and been seven Years a Citizen of the United States, and who shall not, when elected, be an Inhabitant of that State in which he shall be chosen.

*[Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of

Years, and excluding Indians not taxed, three-fifths of all other Persons.] The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct. The Number of Representatives shall not exceed one for every Thirty Thousand, but each State shall have at Least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to choose three, Massachusetts eight, Rhode Island and Providence Plantations one, Connecticut five, New York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.

When vacancies happen in the Representation from any State, the Executive Authority thereof shall issue Writs of Election to fill such Vacancies.

The House of Representatives shall choose their Speaker and other Officers; and shall have the sole Power of Impeachment.

SEC. 3. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six Years; and each Senator shall have one Vote.

Immediately after they shall be assembled in Consequence of the first Election, they shall be divided as equally as may be into three Classes. The Seats of the Senators of the first Class shall be vacated at the Expiration of the second Year, of the second Class at the Expiration of the fourth Year, and the third Class at the Expiration of the sixth Year, so that one-

*The clause included in brackets is amended by the 14th Amendment, 2d Section.

third may be chosen every second Year; and if Vacancies happen by Resignation, or otherwise, during the Recess of the Legislature of any State, the Executive thereof may make temporary Appointments until the next Meeting of the Legislature, which shall then fill such Vacancies.

No Person shall be a Senator who shall not have attained to the Age of thirty Years, and been nine Years a Citizen of the United States, and who shall not, when elected, be an Inhabitant of that State for which he shall be chosen.

The Vice President of the United States shall be President of the Senate, but shall have no Vote, unless they be equally divided.

The Senate shall choose their other Officers, and also a President pro tempore, in the Absence of the Vice President, or when he shall exercise the office of President of the United States.

The Senate shall have the sole Power to try all Impeachments. When sitting for that Purpose, they shall be on Oath or Affirmation. When the President of the United States is tried, the Chief Justice shall preside: And no Person shall be convicted without the Concurrence of two-thirds of the Members present.

Judgment in Cases of Impeachment shall not extend further than to removal from Office, and disqualification to hold and enjoy any office of Honor, Trust or Profit under the United States: but the Party convicted shall nevertheless be liable and subject to Indictment, Trial Judgment and Punishment, according to Law.

SEC. 4. The Times, Places and Manner of holding Elections for Senators and Representatives, shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by Law make or alter such Regulations, except as to the Places of choosing Senators.

*The Congress shall assemble at least once in every Year and such Meeting shall be on the first Monday in December, unless they shall by Law appoint a different Day.

SEC. 5. Each House shall be the Judge of the Elections, Returns and Qualifications of its own Members, and a Majority of each shall constitute a Quorum to do Business; but a smaller Number may adjourn from day to day, and may be authorized to compel the attendance of absent Members, in such Manner, and under such Penalties as each House may provide.

Each House may determine the Rules of its Proceedings, punish its Members for disorderly Behavior, and, with the Concurrence of two-thirds, expel a Member.

Each House shall keep a Journal of its Proceedings, and from time to time publish the same, excepting such Parts as may in their judgment require Secrecy; and the Yeas and Nays of the Members of either House on any question shall, at the Desire of one-fifth of those present, be entered on the Journal.

Neither House, during the Session of Congress, shall, without the consent of the other, adjourn for more than three days, nor to any other Place than that in which the two Houses shall be sitting.

SEC. 6. The Senators and Representatives shall receive a Compensation for their Services, to be ascertained by Law, and paid out of the Treasury of the United States. They shall in all Cases, except Treason, Felony and Breach of the Peace, be privileged from Arrest during their Attendance at the Session of their respective Houses, and in going to and returning from the same; and for any Speech or Debate in either House, they shall not be questioned in any other Place.

No Senator or Representative shall,

*The clause has been replaced by the 22nd Amendment, Section 2.

during the Time for which he was elected, be appointed to any civil Office under the Authority of the United States, which shall have been created, or the Emoluments whereof shall have been increased during such time; and no Person holding any Office under the United States, shall be a Member of either House during his Continuance in Office.

SEC. 7. All Bills for raising Revenue shall originate in the House of Representatives; but the Senate may propose or concur with Amendments as on other Bills.

Every Bill which shall have passed the House of Representatives and the Senate, shall, before it becomes a Law, be presented to the President of the United States; if he approves he shall sign it, but if not he shall return it, with his Objection to that House in which it shall have originated, who shall enter the Objections at large on their Journal and proceed to reconsider it. If after such Reconsideration two-thirds of that House shall agree to pass the Bill, it shall be sent, together with the Objections, to the other House, by which it shall likewise be reconsidered, and if approved by two-thirds of that House it shall become a Law. But in all such Cases the Votes of both Houses shall be determined by Yeas and Nays, and the Names of the Persons voting for and against the Bill shall be entered on the Journal of each House respectively. If any Bill shall not be returned by the President within ten Days (Sundays excepted) after it shall have been presented to him, the Same shall be a Law in like Manner as if he had signed it, unless the Congress by their Adjournment prevent its Return, in which Case it shall not be a Law.

Every Order, Resolution, or Vote to which the Concurrence of the Senate and House of Representatives may be necessary (except on a question of Adjournment) shall be presented to the

President of the United States; and before the Same shall take Effect, shall be approved by him, or being disapproved by him, shall be repassed by two-thirds of the Senate and House of Representatives, according to the Rules and Limitations prescribed in the Case of a Bill.

SEC. 8. The Congress shall have Power to lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defense and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States.

To borrow Money on the credit of the United States;

To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes;

To establish an uniform Rule of Naturalization, and uniform Laws on the subject of Bankruptcies throughout the United States;

To coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures;

To provide for the Punishment of counterfeiting the Securities and current Coin of the United States;

To establish Post Offices and post Roads;

To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries;

To constitute Tribunals inferior to the Supreme Court;

To define and punish Piracies and Felonies committed on the high Seas, and Offences against the Law of Nations;

To declare War, grant Letters of Marque and Reprisal, and make Rules concerning Captures on Land and Water;

To raise and support Armies, but no Appropriation of Money to that Use

shall be for a longer Term than two Years;

To provide and maintain a Navy;

To make Rules for the Government and Regulation of the land and naval Forces;

To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions;

To provide for organizing, arming, and disciplining, the Militia, and for governing such Part of them as may be employed in the Service of the United States, reserving to the States respectively the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress;

To exercise exclusive Legislation in all Cases whatsoever, over such District (not exceeding ten Miles square) as may, by Cession of particular States, and the Acceptance of Congress, become the Seat of the Government of the United States, and to exercise like Authority over all Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards, and other needful Buildings;—And

To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof..

SEC. 9. The Migration or Importation of such Persons as any of the States now existing shall think proper to admit, shall not be prohibited by the Congress prior to the Year one thousand eight hundred and eight, but a Tax or duty may be imposed on such importation, not exceeding ten dollars for each Person.

The Privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion

the Public Safety may require it.

No Bill of Attainder or ex post facto Law shall be passed.

No Capitation, or other direct, tax shall be paid, unless in Proportion to the Census or Enumeration herein before directed to be taken.

No Tax or Duty shall be laid on Articles exported from any State.

No Preference shall be given by any Regulation of Commerce or Revenue to the Ports of one State over those of another; nor shall Vessels bound to, or from, one State be obliged to enter, clear, or pay Duties in another.

No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law; and a regular Statement and Account of the Receipts and Expenditures of all public Money shall be published from time to time.

No Title of Nobility shall be granted by the United States: And no Person holding any Office of Profit or Trust under them, shall, without the Consent of the Congress, accept of any present, Emolument, Office, or Title, of any kind whatever, from any King, Prince, or foreign State.

SEC. 10. No State shall enter into any Treaty, Alliance, or Confederation; grant Letters of Marque and Reprisal; coin Money, emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts; pass any Bill of Attainder, ex post facto Law, or Law impairing the Obligation of Contracts, or grant any Title of Nobility.

No State shall, without the Consent of the Congress, lay any Imposts or Duties on Imports or Exports, except what may be absolutely necessary for executing its inspection Laws; and the net Produce of all Duties and Imposts, laid by any State on Imports or Exports, shall be for the Use of the Treasury of the United States; and all such Laws shall be subject to the Revision and Control of the Congress.

No State shall, without the Consent of Congress, lay any Duty of Tonnage, keep Troops, or ships of War in time of Peace, enter into any Agreement or Compact with another State, or with a foreign Power, or engage in War, unless actually invaded, or in such imminent Danger as will not admit of delay.

ARTICLE II.

SECTION 1. The executive Power shall be vested in a President of the United States of America. He shall hold his Office during the Term of four Years, and, together with the Vice President, chosen for the same term, be elected, as follows:

Each State shall appoint, in such Manner as the Legislature thereof may direct, a Number of Electors, equal to the whole Number of Senators and Representatives to which the State may be entitled in the Congress; but no Senator or Representative, or Person holding an Office of Trust or Profit under the United States, shall be appointed an Elector.

*["The electors shall meet in their respective States, and vote by ballot for two Persons, of whom one at least shall not be an Inhabitant of the same State with themselves. And they shall make a List of all the Persons voted for, and of the Number of vote for each; which List they shall sign and certify, and transmit sealed to the Seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the Presence of the Senate and House of Representatives, open all the Certificates, and the Votes shall then be counted. The Person having the greatest Number of Votes shall be the President, if such a Number be a Majority of the whole Number of Electors appointed; and if there be more than one who have such Majority, and have

*This clause has been replaced by the 12th Amendment.

an equal Number of Votes, then the House of Representatives shall immediately choose by Ballot one of them for President; and if no Person have a Majority, then from the five highest on the List the said House shall in like Manner choose the President. But in choosing the President the Votes shall be taken by States, the Representation from each State having one Vote; A quorum for this Purpose shall consist of a Member or Members from two-thirds of the States, and a Majority of all the States shall be necessary to a Choice. In every Case, after the Choice of the President, the Person having the greatest Number of Votes of the Electors shall be the Vice President. But if there should remain two or more who have equal Votes, the Senate shall choose from them by Ballot the Vice President."]

The Congress may determine the Time of choosing the Electors, and the Day on which they shall give their Votes; which Day shall be the same throughout the United States.

No Person except a natural born Citizen, or a Citizen of the United States, at the time of the Adoption of this Constitution, shall be eligible to the Office of President; neither shall any Person be eligible to that Office who shall not have attained the Age of thirty-five Years, and been fourteen Years a Resident within the United States.

In Case of the Removal of the President from Office, or of his Death, Resignation, or Inability to discharge the Powers and Duties of the said Office, the same shall devolve on the Vice President, and the Congress may by Law provide for the Case of Removal, Death, Resignation, or Inability, both of the President and Vice President, declaring what Officer shall then act as President, and such Officer shall act accordingly, until the Disability be removed, or a President shall be elected.

The President shall, at stated Times, receive for his Services, a Compensation, which shall neither be increased nor diminished during the Period for which he shall have been elected, and he shall not receive within that Period any other Emolument from the United States, or any of them.

Before he enter on the Execution of his Office, he shall take the following Oath or Affirmation:—"I do solemnly swear (or affirm) that I will faithfully execute the Office of President of the United States, and will to the best of my Ability, preserve, protect and defend the Constitution of the United States."

SEC. 2. The President shall be Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States; he may require the Opinion, in writing, of the principal Officer in each of the Executive Departments, upon any Subject relating to the Duties of their respective Offices, and he shall have Power to grant Reprieves and Pardons for Offenses against the United States, except in Cases of Impeachment.

He shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two-thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the Supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for, and which shall be established by Law; but the Congress may by Law vest the Appointment of such inferior Officers, as they think proper, in the President alone, in the Courts of Law, or in the Heads of Departments.

The President shall have Power to fill up all Vacancies that may happen during the Recess of the Senate, by

granting Commissions which shall expire at the end of their next Session.

SEC. 3. He shall from time to time give to the Congress Information of the State of the Union, and recommend to their Consideration such Measures as he shall judge necessary and expedient; he may, on extraordinary Occasions, convene both Houses, or either of them, and in Case of Disagreement between them, with Respect to the Time of Adjournment, he may adjourn them to such Time as he shall think proper; he shall receive Ambassadors and other public Ministers; he shall take Care that the Laws be faithfully executed, and shall Commission all the Officers of the United States.

SEC. 4. The President, Vice President and all civil Officers of the United States, shall be removed from Office on Impeachment for, and Conviction of Treason, Bribery, or other high Crimes and Misdemeanors.

ARTICLE III.

SECTION 1. The judicial Power of the United States, shall be vested in one supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish. The Judges, both of the supreme and inferior Courts, shall hold their Offices during good Behavior and shall, at stated Times, receive for their Services, a Compensation, which shall not be diminished during their continuance in Office.

SEC. 2. The Judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority;—to all Cases affecting Ambassadors, other public Ministers and Consuls;—to all Cases of admiralty and maritime Jurisdiction;—to Controversies to which the United States shall be a party;—to Controversies between two or more

States;—between a State and Citizens of another State;—between Citizens of different States;—between Citizens of the same State claiming Lands under Grants of different States, and between a State, or the Citizens thereof, and foreign States, Citizens or Subjects.

In all Cases affecting Ambassadors, other public ministers and Consuls, and those in which a State shall be Party, the supreme Court shall have original jurisdiction. In all the other Cases before mentioned, the supreme Court shall have appellate Jurisdiction, both as to Law and Fact, with such Exceptions, and under such Regulations as the Congress shall make.

The Trial of all Crimes, except in Cases of Impeachment, shall be by Jury; and such Trial shall be held in the State where the said Crimes shall have been committed; but when not committed within any State, the Trial shall be at such Place or Places as the Congress may by Law have directed.

SEC. 3. Treason against the United States, shall consist only in levying War against them, or in adhering to their Enemies, giving them Aid and Comfort. No Person shall be convicted of Treason unless on the Testimony of two Witnesses to the same Overt Act, or on Confession in open Court.

The Congress shall have Power to declare the Punishment of Treason, but no Attainder of Treason shall work Corruption of Blood, or Forfeiture except during the Life of the Person attainted.

ARTICLE IV.

SECTION 1. Full Faith and Credit shall be given in each State to the public Acts, Records, and judicial Proceedings of every other State. And the Congress may by general Laws prescribe the Manner in which such Acts, Records, and Proceedings shall be proved, and the Effect thereof.

SEC. 2. The Citizens of each State shall be entitled to all Privileges and

Immunities of Citizens in the several States.

A Person charged in any State with Treason, Felony, or other Crime, who shall flee from Justice, and be found in another State, shall on Demand of the executive Authority of the State from which he fled, be delivered up to be removed to the State having Jurisdiction of the Crime.

No Person held to Service or Labour in one State, under the Laws thereof, escaping into another, shall, in Consequence of any Law or Regulation therein, be discharged from such Service or Labour, but shall be delivered up on Claim of the Party to whom such Service or Labour may be due.

SEC. 3. New States may be admitted by the Congress into this Union, but no new State shall be formed or erected within the Jurisdiction of any other State; nor any State be formed by the Junction of two or more States, or Parts of States, without the Consent of the Legislatures of the States concerned as well as of the Congress.

The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States; and nothing in this Constitution shall be so construed as to Prejudice any Claims of the United States, or of any particular State.

SEC. 4. The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and on Application of the Legislature, or of the Executive (when the Legislature cannot be convened) against domestic Violence.

ARTICLE V.

The Congress, whenever two thirds of both Houses shall deem it necessary, shall propose Amendments to this Constitution, or, on the Application of the Legislatures of two thirds of the several States, shall call a Convention for

proposing Amendments, which, in either Case, shall be valid to all Intent and Purposes, as Part of this Constitution, when ratified by the Legislatures of three fourths of the several States, or by Conventions in three fourths thereof, as the one or the other Mode of Ratification may be proposed by the Congress; Provided that no Amendment which may be made prior to the Year One thousand eight hundred and eight shall in any Manner affect the first and fourth Clauses in the Ninth Section of the first Article; and that no State, without its Consent, shall be deprived of its equal Suffrage in the Senate.

ARTICLE VI.

All Debts contracted and Engagements entered into, before the Adoption of this Constitution, shall be as valid against the United States under this Constitution, as under the Confederation.

This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the Supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.

The Senators and Representatives before mentioned, and the Members of the several State Legislatures, and all executive and judicial Officers, both of the United States and of the several States, shall be bound by Oath or Affirmation, to support this Constitution; but no religious Test shall ever be required as a Qualification to any Office or public Trust under the United States.

ARTICLE VII.

The Ratification of the Conventions of nine States shall be sufficient for the

Establishment of this Constitution between the States so ratifying the Same.

DONE in Convention by the Unanimous Consent of the States Present the Seventeenth Day of September in the Year of our Lord one thousand seven hundred and eighty seven, and of the Independence of the United States of America the Twelfth.

AMENDMENTS

Articles in Addition to, and Amendment of, the Constitution of the United States of America, Proposed by Congress, and Ratified by the Legislatures of the Several States Pursuant to the Fifth Article of the Original Constitution.

ARTICLE I.

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

ARTICLE II.

A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.

ARTICLE III.

No soldier shall, in time of peace, be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.

ARTICLE IV.

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or

affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

ARTICLE V.

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offense to be twice put in jeopardy of life or limb; nor shall be compelled in any Criminal Case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

ARTICLE VI.

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining Witnesses in his favor, and to have the Assistance of Counsel for his defense.

ARTICLE VII.

In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury shall be otherwise re-examined in any Court of the United States than according to the rules of the common law.

ARTICLE VIII.

Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

ARTICLE IX.

The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.

ARTICLE X.

The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

ARTICLE XI.

The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State.

ARTICLE XII.

The Electors shall meet in their respective States and vote by ballot for President and Vice President, one of whom, at least, shall not be an inhabitant of the same State with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice President and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice President, and of the number of votes for each, which lists they shall sign and certify, and transmit sealed to the seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates and the votes shall then be counted. The person having the greatest number of votes for President shall be the President, if such number be a majority of the whole number of Electors appointed; and if no person have such majority, then from the persons having the highest numbers not exceeding three on the

list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President, the votes shall be taken by States, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the States, and a majority of all the States shall be necessary to a choice. And if the House of Representatives shall not choose a President, whenever the right of choice shall devolve upon them, before the fourth day of March next following, then the Vice President shall act as President, as in the case of the death or other constitutional disability of the President. The person having the greatest number of votes as Vice President shall be the Vice President, if such number be a majority of the whole number of Electors appointed, and if no person have a majority, then from the two highest numbers on the list, the Senate shall choose the Vice President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice President of the United States.

ARTICLE XIII.

SECTION 1. Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

SEC. 2. Congress shall have power to enforce this article by appropriate legislation.

ARTICLE XIV.

SECTION 1. All persons born or naturalized in the United States and subject to the jurisdiction thereof, are citizens of the United States and of the

State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

SEC. 2. Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice President of the United States, Representatives in Congress, the Executive and Judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male inhabitants of such State, being twenty-one years of age, and citizens of the United States, or in any way abridged except for participation in rebellion, or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

SEC. 3. No person shall be a Senator or Representative in Congress, or elector of President and Vice President or hold any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State legislature, or as an executive or judicial officer of any State, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may, by a vote of two-thirds of each House, remove such disability.

SEC. 4. The validity of the public debt of the United States, authorized by law, including debts incurred for

payment of pensions and bounties for services in suppressing insurrection or rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States, or any claim for the loss of emancipation of any slave; but all such debts, obligations and claims shall be held illegal and void.

SEC. 5. The Congress shall have power to enforce, by appropriate legislation, the provisions of this article.

ARTICLE XV.

SECTION 1. The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of race, color, or previous condition of servitude.

SEC. 2. The Congress shall have power to enforce this article by appropriate legislation.

ARTICLE XVI.

The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration.

ARTICLE XVII.

The Senate of the United States shall be composed of two Senators from each State, elected by the people thereof, for six years and each Senator shall have one vote. The electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State legislatures.

When vacancies happen in the representation of any State in the Senate, the executive authority of such State shall issue writs of election to fill such vacancies: *Provided*, That the legislature of any State may empower the executive thereof to make temporary appointments until the people fill the

vacancies by election as the legislature may direct.

This amendment shall not be so construed as to affect the election or term of any Senator chosen before it becomes valid as a part of the Constitution.

ARTICLE XVIII.

*[SECTION 1. After one year from ratification of this article the manufacture, sale, or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.

[SEC. 2. The Congress and the several States shall have concurrent power to enforce this article by appropriate legislation.

[SEC. 3. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of the several States, as provided in the Constitution, within seven years from the date of submission hereof to the States by the Congress.]

ARTICLE XIX.

The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of sex.

Congress shall have power to enforce this article by appropriate legislation.

ARTICLE XX.

SECTION 1. The terms of the President and Vice President shall end at noon on the 20th day of January, and the terms of Senators and Representatives at noon on the 3d day of January, of the years in which such terms would have ended if this article had not been ratified; and the terms of their successors shall then begin.

SEC. 2. The Congress shall assemble

*This amendment has been replaced by the 21st Amendment.

at least once in every year, and such meeting shall begin at noon on the 3d day of January, unless they shall by law appoint a different day.

SEC. 3. If, at the time fixed for the beginning of the term of the President, the President elect shall have died, the Vice President elect shall become President. If a President shall not have been chosen before the time fixed for the beginning of his term, or if the President elect shall have failed to qualify, then the Vice President elect shall act as President until a President shall have qualified; and the Congress may by law provide for the case wherein neither a President elect nor a Vice President elect shall have qualified, declaring who shall then act as President, or the manner in which one who is to act shall be selected, and such person shall act accordingly until a President or Vice President shall have qualified.

SEC. 4. The Congress may by law provide for the case of the death of any of the persons from whom the House of Representatives may choose a President whenever the right of choice shall have devolved upon them, and for the case of the death of any of the persons from whom the Senate

may choose a Vice President whenever the right of choice shall have devolved upon them.

SEC. 5. Sections 1 and 2 shall take effect on the 15th day of October following the ratification of this article.

SEC. 6. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of three-fourths of the several States within seven years from the date of its submission.

ARTICLE XXI.

SECTION 1. The eighteenth article of amendment to the Constitution of the United States is hereby repealed.

SEC. 2. The transportation or importation into any State, Territory, or possession of the United States for delivery or use therein of intoxicating liquors, in violation of the laws thereof, is hereby prohibited.

SEC. 3. The article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by conventions in the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by the Congress.

DECLARATION OF INDEPENDENCE

When, in the Course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness. That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed. That whenever any Form of Government becomes destructive of these ends, it is the Right of the People

to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness. Prudence, indeed, will dictate that Governments long established should not be changed for light and transient causes; and accordingly all experience hath shewn, that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same object, evince a design to reduce them under absolute Despotism, it is their right, it is their duty, to throw off such Government, and to provide new Guards for their future security. Such has been the patient sufferance of these Colonies; and such is now the necessity which constrains them to alter their former Systems of Government. The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute Tyranny over these States. To prove this, let Facts be submitted to a candid world.

He has refused his Assent to Laws, the most wholesome and necessary for the public good.

He has forbidden his Governors to pass Laws of immediate and pressing importance, unless suspended in their operation till his Assent should be obtained, and when so suspended, he has utterly neglected to attend to them.

He has refused to pass other Laws for the accommodation of large districts of people, unless those people would relinquish the right of Representation in the Legislature, a right inestimable to them and formidable to tyrants only.

He has called together legislative bodies at places, unusual, uncomfortable, and distant from the depository of their public Records, for the sole

purpose of fatiguing them into compliance with his measures.

He has dissolved Representative Houses repeatedly, for opposing with manly firmness his invasions on the rights of the people.

He has refused for a long time, after such dissolutions, to cause others to be elected; whereby the Legislative powers, incapable of Annihilation, have returned to the People at large for their exercise; the State remaining in the meantime exposed to all the dangers of invasion from without, and convulsions within.

He has endeavored to prevent the population of these States; for that purpose obstructing the Laws for Naturalization of Foreigners; refusing to pass others to encourage their migrations hither, and raising the conditions of new Appropriations of Lands.

He has obstructed the Administration of Justice, by refusing his Assent to Laws for establishing Judiciary powers.

He has made Judges dependent on his Will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of New Offices, and sent hither swarms of Officers to harass our people, and eat out their substance.

He has kept among us, in times of peace, Standing Armies, without the Consent of our legislatures.

He has affected to render the Military independent of and superior to the Civil power.

He has combined with others to subject us to a jurisdiction foreign to our constitution and unacknowledged by our laws; giving his Assent to their Acts of pretended Legislation: For quartering large bodies of armed troops among us: For protecting them by a mock Trial from punishment for any Murders which they should commit on the Inhabitants of these States: For cutting off our Trade with all parts of

the world: For imposing Taxes on us without our Consent: For depriving us in many cases of the benefits of Trial by Jury: For transporting us beyond Seas to be tried for pretended offenses: For abolishing the free System of English Laws in a neighbouring Province, establishing therein an Arbitrary government, and enlarging its Boundaries so as to render it at once an example and fit instrument for introducing the same absolute rule into these Colonies: For taking away our Charters, abolishing our most valuable Laws and altering fundamentally the Forms of our Governments: For suspending our own Legislatures and declaring themselves invested with power to legislate for us in all cases whatsoever.

He has abdicated Government here by declaring us out of his Protection and waging War against us.

He has plundered our seas, ravished our Coasts, burnt our towns, and destroyed the lives of our people.

He is at this time transporting large Armies of foreign Mercenaries to complete the works of death, desolation and tyranny, already begun with circumstances of cruelty and perfidy scarcely paralleled in the most barbarous ages, and totally unworthy the Head of a civilized nation.

He has constrained our fellow Citizens taken Captive on the high Seas to bear Arms against their Country, to become the executioners of their friends and Brethren, or to fall themselves by their Hands.

He has excited domestic insurrections amongst us, and has endeavoured to bring on the inhabitants of our frontiers, the merciless Indian Savages, whose known rule of warfare is an undistinguished destruction of all ages, sexes and conditions. In every stage of these Oppressions We have Petitioned for Redress in the most humble terms. Our repeated Petitions have been answered only by repeated injury. A

Prince, whose character is thus marked by every act which may define a Tyrant, is unfit to be the ruler of a free people. Nor have We been wanting in attention to our British brethren. We have warned them from time to time of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them by the ties of our common kindred to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They too have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity, which denounces our Separation, and hold them, as we hold the rest of mankind, Enemies in War, in Peace Friends.

WE, THEREFORE, the Representatives of the United States of America, in General Congress, Assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions do, in the Name, and by authority of the good People of these Colonies, solemnly publish and declare, That these United Colonies are, and of Right ought to be, Free and Independent States: that they are Absolved from all Allegiance to the British Crown, and that all political connection between them and the State of Great Britain is and ought to be totally dissolved: and that as Free and Independent States, they have full Power to levy War, conclude Peace, contract Alliances, establish Commerce, and to do all other Acts and Things which Independent States may of right do. And for the support of this Declaration, with a firm reliance on the protection of Divine Providence, we mutually pledge to each other our Lives, our Fortunes, and our sacred Honor.

THE MONROE DOCTRINE

The Monroe Doctrine was first announced in President Monroe's message to Congress, December 2, 1823:

In the discussions to which this interest has given rise, and in the arrangements by which they may terminate, the occasion has been deemed proper for asserting as a principle in which rights and interests of the United States are involved, that the American continents, by the free and independent condition which they have assumed and maintain, are henceforth not to be considered as subjects for future colonization by any European power. . . . We owe it, therefore, to candor and to the amicable relations existing between the United States and those powers to declare that

we should consider any attempt on their part to extend their system to any portion of this hemisphere as dangerous to our peace and safety. With the existing colonies or dependencies of any European power we have not interfered and shall not interfere. But with the governments who have declared their independence and maintain it, and whose independence we have, on great consideration and on just principles, acknowledged, we could not view any interposition for the purpose of oppressing them or controlling in any other manner their destiny by any European power in any other light than as the manifestation of an unfriendly disposition toward the United States.

NATIONAL SYMBOLS AND TRADITIONS

Seal of the United States

The Seal of the United States is affixed to Presidential proclamations, ratifications of treaties and other documents after they have been signed by the President. It was designed by William Barton and adopted by the Continental Congress in 1782. The seal is kept in the Division of Departmental Personnel of the Department of State, and bears the stripes of the escutcheon on the breast of an eagle, an olive branch and arrows signifying the power of peace and war, the Constellation and the motto "E Pluribus Unum."

The Flag of the United States

History. A flag with thirteen blue and silver stripes was carried by the Philadelphia Troop of Light Horse in 1775. On January 2 of the following year, George Washington raised a flag which consisted of thirteen alternate

red and white stripes, with the crosses of St. Andrew and St. George against a blue background in the upper left-hand corner. Authorities on American history doubt the legend that attributes the making of the first Stars and Stripes flag to Betsy Ross. It is probable that Francis Hopkinson—one of the signers of the Declaration of Independence—designed the Stars and Stripes, which were authorized in 1777. An Act of Congress in 1795 decreed that "from and after May 1, 1795, the flag of the United States be fifteen stripes, alternate red and white; and that the union be fifteen stars, white in a blue field." This flag, on which the stars were arranged in three rows of five, was used until 1818 when Congress passed a law to provide that "from and after the fourth day of July next, the flag of the United States be thirteen horizontal stripes, alternate red and white; that the union have twenty stars, white on a blue field."

Upon the admission of each new state to the union, another star was to be added to the flag.

The flag has contained 48 stars since Arizona entered the union in 1912. Congress has passed no law designating how the stars should be arranged, but they customarily form six rows of eight stars each, and the idea of using them was suggested by the constellation of Lyra. Daring is denoted by the red stripes, and purity by the white. The blue background of the stars was "taken from the edges of the Covenantant's banner in Scotland, significant of the league-covenant of the United Colonies against oppression, incidentally involving the virtues of vigilance, perseverance and justice."

Proper Display. The flag is customarily displayed from sunrise until sunset when on stationary flagstuffs or on buildings. When the weather permits, the flag should be displayed daily on or near the principal administration building of any public institution, and in or near all schools on the days when school is in session. Upon certain important occasions requiring a patriotic effect, the flag may be displayed after dark, but should never be used for advertising purposes.

Special days on which flags are generally displayed include New Year's Day, January 1; Abraham Lincoln's Birthday, February 12; George Washington's Birthday, February 22; Easter Sunday; Mother's Day, which is the second Sunday in May; Memorial Day, occurring on May 30—when the flag must remain at half staff until noon; Flag Day, June 14; Independence Day, July 4; Labor Day, the first Monday in September; Columbus Day, October 12; Armistice Day, November 11; Thanksgiving Day, the fourth Thursday in November; and Christmas Day, December 25.

When displayed in a parade, the flag should always be flown from a staff and never draped over any object.

It is not permissible to place another flag above it, except during a church service performed by a navy chaplain at sea; in this instance the church pennant may be placed above the flag until the service is over. When carried in a procession, the American flag should be at the center of any group of flags. When carried in a procession with one other flag, the American flag is carried on the marching right.

On a speaker's platform, the flag should be displayed behind and above the speaker; when displayed from a staff which projects from the side of a building, the union (stars against the blue background) must be placed at the peak of the staff, unless it is necessary to display the flag at half staff. If other flags are flown near the American flag, they must not be noticeably larger in size. The flag should be displayed flat when it is not flown from a staff, or should be suspended in such a manner that the folds fall freely. If displayed over the middle of a street or public thoroughfare, the flag should be suspended vertically with the union to the east on a north and south street, and to the north on an east and west street.

The flag must never be used as a covering for a statue or monument, and when used to cover a casket, the flag should not be lowered into a grave or permitted to touch the ground. When a flag is to be displayed at half staff, it must first be hoisted to the top of the staff for a moment before being lowered to the half-staff position. If a flag is in a worn condition, it should be destroyed by burning; but it should never be displayed or fastened in a way that will cause it to be damaged.

When the flag is displayed and the National Anthem is rendered, all who are present should face toward the flag and salute. One should stand with the right hand over the heart when giving the pledge of allegiance to the flag: "I pledge allegiance to the flag

of the United States of America and to the republic for which it stands, one Nation indivisible, with liberty and justice for all."

The National Anthem

By an Act of Congress in 1931, "The Star-Spangled Banner" was designated as the National Anthem. Francis Scott Key, who wrote the verses but not the melody of this famous song, became a lawyer in Baltimore after graduating from St. John's College at Annapolis. In 1814 when the United States was at war with Great Britain, he tried to obtain the release of a friend confined on an English ship in the harbor of Baltimore. Using a rowboat to reach the vessel, and carrying a flag of truce as well as a letter from President James Madison, Key accomplished his mission but was detained on board with his friend—since the British were planning to bombard Fort McHenry.

Key vigilantly watched the flag above the fort while the relentless

bombardment was in progress, and at sunrise the next morning the banner had not fallen. While on the ship he composed the first verse of his poem, finishing it after he had returned to shore. *The Baltimore American* published the verses on September 21 of the same year; their popularity was instantaneous, and they were adapted to the melody of "Anacreon in Heaven," an English song.

The late Henry Walters, who was owner of the Walters Art Gallery in Baltimore, acquired the original manuscript of "The Star-Spangled Banner"; and the flag which inspired Key to write his famous composition is in the National Museum at Washington, D.C.

Other popular patriotic songs are: "My Country, 'Tis of Thee," "America, the Beautiful," "Columbia, the Gem of the Ocean," "Hail, Columbia," and more recently "God Bless America." Favorite marches such as "The Stars and Stripes Forever" are also known throughout the nation.

LEGAL OR PUBLIC HOLIDAYS IN THE UNITED STATES

Jan. 1—New Year's Day (all the states, territories, and colonial possessions).

Feb. 12—Lincoln's Birthday (Alaska, Cal., Colo., Conn., Del., Ill., Ind., Iowa, Kan., Ky., Mich., Minn., Mo., Mont., Neb., Nev., N. Dak., N.J., N.Y., N.M., Ohio, Ore., Pa., S. Dak., Tenn., Utah, Wash., W. Va., Wyo., and observed by Governor's proclamation in Mass.).

Feb. 22—Washington's Birthday (all the states, territories, and possessions).

April 15—Good Friday (Friday before Easter) (Conn., Del., Fla., La., Md., Minn., N.J., Pa., Philippines, Puerto Rico, Tenn.).

May 30—Decoration or Memorial Day (all states and possessions, ex-

cept Ala., Ark., Fla., Ga., La., Miss., N. Car., and S. Car.).

July 4—Independence Day (all the states, territories, and possessions).

Sept. (First Monday)—Labor Day. (Every state and territory except the Philippines.)

Oct. 12—Columbus Day (Ark., Ariz., Cal., Colo., Conn., Del., Fla., Idaho, Ill., Ind., Kan., Ky., La., Mass., Me., Md., Mich., Mo., Mont., Neb., Nev., N.H., N.J., N.Y., N. Dak., Ohio, Ore., Pa., R.I., Tex., Utah, Vt., Wash., W. Va., also in Puerto Rico).

Nov. (First Tuesday after first Monday)—General Election Day. Every state and territory except Alaska, Conn., Dist. of Col., Hawaii, Ill., Mass., Miss., Ohio, Philippines, and

Vt. In Illinois it is a legal holiday in Chicago, Springfield, East St. Louis, Galesburg, Danville, Cairo, and Rockford. In Ohio it is a half holiday. In Maine it is a legal holiday only as to the courts, which also close on the State Election Day (biennially, second Monday in Sept.).

Nov. 11—Armistice Day (Ala., Ariz., Ark., Cal., Colo., Conn., Fla., Ga., Ill., Iowa, La., Miss., Minn., Mo., Mont., Neb., N. Car., N. Dak., N.H.,

N.J., Pa., R.I., S. Dak., Tenn., Tex., Vt., Va., and Hawaii. In other states by Governor's proclamation only.

Nov. (Fourth Thursday)—Thanksgiving Day. Every state, territory, and possession. That Thanksgiving Day shall be observed on the fourth Thursday in November was formally declared by Congress, and approved by the President, in December, 1941.

Dec. 25—Christmas Day (every state, territory, and possession).

RANK IN THE UNITED STATES ARMY AND NAVY

The United States Army is older than the United States Navy in point of organization, and it therefore ranks ahead of the younger branch. The President of the United States is the Commander-in-Chief of both branches, and under him—in the order of their rank—are the following officers and grades of enlisted personnel:

ARMY

OFFICERS

General
Lieutenant General
Major General
Brigadier General
Colonel
Lieutenant Colonel
Major
Captain
First Lieutenant
Second Lieutenant
Warrant Officer (Junior Grade)
Chief Warrant Officer (especially designated by Secretary of War)

ENLISTED MEN

Master Sergeant
First Sergeant
Technical Sergeant
Staff Sergeant
Sergeant
Corporal

Private, First Class
Private

NAVY

OFFICERS

Admiral
Vice Admiral
Rear Admiral
Commodore (a retired rank)
Captain
Commander
Lieutenant Commander
Lieutenant
Lieutenant (Junior Grade)
Ensign
Commissioned Warrant Officer
Warrant Officer

ENLISTED MEN

Chief Petty Officer
Petty Officer, 1st Class
Petty Officer, 2nd Class
Petty Officer, 3rd Class
Seaman, 1st Class
Seaman, 2nd Class
Apprentice Seaman

Army officers who hold the rank of Captain or higher should be addressed both in speech and writing with their titles. Below the rank of Captain, they should be introduced with their titles and addressed with them in writing;

but when spoken to, they are addressed as "Mister." In the Navy the rank of Lieutenant Commander marks the same sort of division as Captain in the Army, and the same rules prevail in regard to address. The President of the United States is addressed as "Mr. President" or "Sir" in every capacity—including that of Commander-in-Chief of the Army and Navy.

Commissioned Army officers are en-

titled to an increase of ten per cent in salary for any period of service outside of the continental limits of the United States, or in the territory of Alaska. An increase of 20 per cent is granted to Army warrant officers. Army enlisted men receive an increase of 20 per cent when they are sent into foreign service or sea duty. The same ruling applies to Navy commissioned and warrant officers, and to Navy enlisted men.

FEDERAL DEPARTMENTS AND AGENCIES

Department of State. The Department of State has the principal responsibility for determining the policy of the government in relation to international problems. During wartime it is charged with the conduct of diplomatic phases of the war. Plans and executes measures for international order. The department conducts day-to-day negotiations with foreign countries on all matters affecting the interests of the United States. It prepares instructions to the diplomatic and consular representatives of the United States abroad, and corresponds and confers with the representatives of foreign powers accredited to this country.

The divisions comprising the 12 Offices of the Department of State include the Office of Controls handling passports and visas, Office of Transportation and Communications, Office of Wartime Economic Affairs, Office of Economic Affairs, Office of American Republic Affairs, Offices of European, Near Eastern and African Affairs, Office of Far Eastern Affairs, Office of Special Political Affairs, Office of Public Information, Office of Departmental Administration, Office of Foreign Service Administration.

Department of the Treasury. The Department of the Treasury was created to superintend and manage the national finances. It prepares plans for the improvement and management of the revenue and the support of the public credit, controls the coinage and printing of money, and determines policies and methods of procurement of Federal supplies.

The principal bureaus, divisions, and offices of this department include the Bureau of the Comptroller of the Currency, Bureau of Customs, Bureau of Engraving and Printing, Bureau of Internal Revenue, Bureau of the Mint, Bureau of Narcotics, Division of Monetary Research, Division of Personnel, Division of Research and Statistics, Division of Tax Research, Foreign Funds Control, Office of the Tax Legislative Counsel, Procurement Division acting as the central government purchasing agent, Secret Service, Coast Guard (in peacetime), War Finance Division, Office of the Fiscal Assistant Secretary, Bureau of Accounts, Bureau of the Public Debt, Office of the Treasurer of the United States.

War Department. The War Department is responsible for organizing,

training, and maintaining the Army and certain non-military activities (such as river and harbor development and flood control) at all times in accordance with conditions defined by Congress. The War Department General Staff, under the direction of the Chief of Staff, coordinates the development of the Army and is divided into the following five divisions: Personnel Division, Military Intelligence Division, Organization and Training Division, Supply Division, and Operations Division.

The various branches of the Army include the Army Air Forces, Army Ground Forces, and the Army Service Forces with a staff comprising the Office of the Director of Personnel and the Office of the Director of Military Training, and the Technical Services consisting of the Office of the Quartermaster General, Office of the Chief of Ordnance, Office of the Chief of Engineers, Office of the Chief of Chemical Warfare Service, Office of the Surgeon General, Office of the Chief of Transportation. Nine service commands within the United States perform administrative, training, and supply functions of the Army Service Forces on a geographical basis.

The governor of the Panama Canal, under the supervision of the Secretary of War, is charged with the completion, maintenance, and operation of the Panama Canal, and with the administration, sanitation, and government of the Canal Zone. The Arlington Memorial Amphitheater Commission reports annually to Congress as to what memorials shall be erected and the bodies of what deceased members of the Army, Navy, and Marine Corps shall be entombed during the next ensuing year in the Arlington Memorial Amphitheater in Arlington National Cemetery.

Department of Justice. The Department of Justice enforces Federal laws, furnishes legal counsel in Federal cases,

and interprets laws under which other departments act. The head of the department is the Attorney General. The department conducts all suits (in the Supreme Court) in which the United States is concerned, supervises the Federal penal institutions, and investigates violations of Federal laws. The Attorney General represents the United States in legal matters generally, and gives advice and opinions to the President and to the heads of the departments when so requested.

The principal divisions of the Department of Justice include the Office of the Solicitor General, conducting government litigation in the Supreme Court; Office of the Assistant to the Attorney General, having administrative supervision over all major units of the department and of the United States Attorneys and Marshals; Office of the Assistant Solicitor General, handling all of the department's legislative work; Office of the Pardon Attorney, Antitrust Division, Tax Division, Claims Division handling all civil suits and claims for and against the Federal Government, Lands Division, Criminal Division, War Division performing functions relating to war planning, alien enemy control, and alien property litigation; Customs Division, Administrative Division, Federal Bureau of Investigation, Bureau of Prisons, Immigration and Naturalization Service, Board of Immigration Appeals, and the Parole Board.

Post Office Department. The Post Office Department was created to "provide the best means of establishing posts for conveying letters and intelligence through this continent." Important developments are postage stamps, registered mail, railway mail service, city delivery service, postal and foreign money orders, special delivery, rural delivery, postal savings, parcel post, and air mail. The Postmaster General superintends the business of the department, executes all laws relating to the

Postal Service, and negotiates postal treaties (subject to the approval of the President) with foreign governments.

The principal offices and divisions of the Post Office Department include the Office of Budget and Administrative Planning; Bureau of the First Assistant Postmaster General (containing Divisions 1, 2, 3 and 4 of the Post Office Service) where the Special Administrative Aide acts as adviser to the First Assistant; Bureau of the Second Assistant Postmaster General, composed of the Division of Air Mail Service, Division of International Postal Service, Division of Railway Adjustments, Division of Railway Mail Service; Bureau of the Third Assistant Postmaster General, comprising the Division of Letter and Miscellaneous Mail, Division of Newspaper and Periodical Mail, Division of Finance and Disbursing Office, Division of Money Orders, Division of Parcel Post, Division of Postal Savings, Division of Registered Mail, Division of Stamps; Bureau of the Fourth Assistant Postmaster General, comprising the Division of Motor Vehicle Service, Division of Post Office Quarters, Division of Topography, Division of Engineering and Research, Division of Traffic, Division of Equipment and Supplies, Division of Federal Building Operations, and Mail Equipment Shops; Bureau of the Chief Inspector, Office of the Solicitor, Office of the Purchasing Agent.

Department of the Navy. The Department of the Navy supervises and maintains a naval establishment in readiness for the performance of such duties as the President (who is Commander-in-Chief) may order. The fundamental naval policy of the United States is to maintain the Navy in sufficient strength to support national policies and commerce, and to guard the continental and overseas possessions of the United States.

The Secretary's Office is the headquarters for the Secretary of the Navy,

Under Secretary of the Navy, Assistant Secretary of the Navy, Assistant Secretary of the Navy for Air. The Executive Offices of the Secretary contain the General Board, Office of Public Relations, Office of Budget and Reports, Office of War Savings Bonds, Office of Petroleum Reserves, Division of Training Liaison and Coordination, Lend-Lease Liaison Office, the Interior Control Board, Office of Coordinator of Research and Development, Board of Decorations and Medals. Reporting to the Under Secretary of the Navy are the following: Office of the Judge Advocate General, having cognizance of all matters of law which involve the service; Office of the Chief of Procurement and Material, Procurement Legal Division, Naval Examining and Retiring Boards and Board of Medical Examiners, Board for Production Awards, Industrial Incentive Division, Naval Clemency and Prison Inspection Board.

Reporting to the Assistant Secretary are the following: Division of Shore Establishments and Civilian Personnel, Administrative Office, Transportation Branch, Office of the Management Engineer, Inspection Division. Under the jurisdiction of the Commander-in-Chief of the United States Fleet and his Chief of Staff are the Naval Inspector General, Vice Chief of Naval Operations, Deputy Chief of Naval Operations (Air). Bureaus of the Department of the Navy include the Bureau of Naval Personnel, Bureau of Ordnance, Bureau of Ships, Bureau of Yards and Docks, Bureau of Supplies and Accounts, Bureau of Medicine and Surgery, Bureau of Aeronautics. Other divisions are the Marine Corps Headquarters and the United States Coast Guard.

Department of the Interior. The Department of the Interior is concerned with promoting domestic welfare and administering the conservation of natural resources. The principal

bureaus, divisions, and offices of the department include the Bonneville Power Administration, the Bureau of Mines which develops methods for treating ores to produce metals and non-metals, Coal Mines Administration, Bureau of Reclamation, Division of Power, Division of Territories and Island Possessions, Fish and Wildlife Service which conducts wildlife and fishery investigations in the interest of conserving our natural resources, General Land Office, Geological Survey, Grazing Service, National Park Service, Office of Indian Affairs, Office of Land Utilization, Office of Fishery Coordination, Solid Fuels Administration for War, Petroleum Conservation Division, Southwestern Power Administration, United States Board on Geographical Names, and the War Relocation Authority.

Department of Agriculture. The Department of Agriculture collects and distributes useful information on subjects connected with agriculture, and performs functions relating to agricultural education, conservation, marketing, regulatory work, and agricultural adjustment. The principal bureaus and offices of the department include the Agricultural Research Administration, which directs scientific research activities and comprises the Bureau of Animal Industry, Bureau of Dairy Industry, Bureau of Human Nutrition and Home Economics, Bureau of Plant Industry, Soils, and Agricultural Engineering, Bureau of Agricultural and Industrial Chemistry, Bureau of Entomology and Plant Quarantine, Office of Experiment Stations. The Farm Credit Administration gives farmers a public source of credit at reasonable rates and on a sound appraisal basis. The Forest Service administers the national forests, carries on research, and conducts a forest survey of the United States. The Rural Electrification Administration administers the public program of enabling farms and other

rural enterprises to achieve new efficiency by using electric current.

Department of Commerce. The Department of Commerce is mainly concerned with promoting the nation's industry and trade, and foreign commerce; and its activities are designed to advance the welfare of producers and exporters, encourage inventors, establish commodity standards for manufacturers, foster air transportation, protect varied enterprises by issuing weather and flood forecasts, and supply interested individuals and institutions with population and industrial statistics. The department's principal bureaus, divisions, and offices include the Bureau of the Census, Bureau of Foreign and Domestic Commerce, Civil Aeronautics Administration, Coast and Geodetic Survey which surveys and charts coasts to insure safe navigation, Inland Waterways Corporation, National Bureau of Standards, National Inventors Council, Patent Office, and the Weather Bureau. The Civil Aeronautics Board prescribes safety standards, rules and regulations for air traffic, and has the power to suspend and revoke safety certificates.

Department of Labor. The Department of Labor fosters, promotes, and develops the welfare of American wage earners, improves their working conditions, and advances their opportunities for profitable employment. It also directs investigation of matters pertaining to child welfare. The principal bureaus and divisions of the department include the Bureau of Labor Statistics, the Children's Bureau, Division of Labor Standards, United States Conciliation Service dealing with industrial controversies, Wage and Hour and Public Contracts Divisions which enforce the wage-and-hour provisions of the Fair Labor Standards Act, and the Women's Bureau.

Executive Office of the President. Established in 1939, the Executive Office of the President comprises, in

addition to the White House Office, the Bureau of the Budget, which prepares the Annual Budget, supervises and controls its administration, and formulates the fiscal program of the government.

Federal Security Agency. The Federal Security Agency is concerned with promoting social and economic security, advancing educational opportunities, and protecting the public health. It coordinates the following agencies: the Food and Drug Administration, Office of Education, Office of Vocational Rehabilitation, Public Health Service, St. Elizabeth's Hospital, and the Social Security Board.

Federal Works Agency. The Federal Works Agency was created in 1939 to coordinate a group of government agencies concerned with the provision and financing of public works and services through Federal grants, or loans for direct Federal construction. It conducts the War Public Works and Service Programs, and the Public Buildings Administration as well as the Public Roads Administration.

Independent Agencies. The principal independent government agencies include the American Battle Monuments, Board of Investigation and Research—Transportation, Commission of Fine Arts, District of Columbia—the government of which is administered by a three-man board of commissioners having authority over the usual activities of municipal government, Federal Board of Hospitalization, Federal Communications Commission, Federal Deposit Insurance Corporation which insures deposits—up to a maximum of \$5,000 for any one depositor in each bank—of all banks entitled to the benefits of insurance under the law, Federal Power Commission providing for the licensing of hydroelectric developments and regulating electric utilities engaged in interstate commerce, Federal Reserve System comprising the Board of Governors which

supervises the Federal Reserve Banks, Federal Trade Commission promoting free and fair competition in interstate trade, General Accounting Office, Government Printing Office, Interstate Commerce Commission, Library of Congress, National Advisory Committee for Aeronautics, National Archives, National Capital Park and Planning Commission, National Labor Relations Board, National Mediation Board, Railroad Retirement Board, Reconstruction Finance Corporation, Securities and Exchange Commission, Smithsonian Institution, Tax Court of the United States, Tennessee Valley Authority, U.S. Civil Service Commission, U.S. Employees' Compensation Commission, U.S. Maritime Commission, U.S. Tariff Commission, Veterans Administration.

Civil Service System

"Civil service" refers to the body of employees in the civil administration of the government with the exception of the military or those who are elected to office. In the United States the term also excludes persons who are employed in the legislative or judicial branches of the Federal government. Until 1883 admission to the public service was almost exclusively by appointment for political or other special reasons. With the passage of the Civil Service Act of that year, a Civil Service Commission of three persons was established and empowered to set up a merit system whereby selection for appointment would be made on the basis of fitness for the job without regard to religious or political considerations. At the present time the employees of all agencies in the executive branch of the government are chosen through examination by the Civil Service Commission with the exception of employees in these agencies: The Foreign Service of the Department of State, the Federal Bureau of Investigation, the Commissioned Corps of the Public Health

Service, and the Tennessee Valley Authority. Each of these agencies, however, has its own merit system. The total number of employees in the civil service in June, 1944, was 2,900,000.

The Civil Service Commission has a central office in Washington, D. C., and thirteen Regional Offices throughout the country which have jurisdiction over field civil service activities in the geographic area within the region.

Periodically the Commission holds examinations for positions in the civil service in response to requests for personnel from departments and agencies. About a half-million persons are examined annually by the Commission.

Employees in the Federal civil service work a basic 40-hour week. They receive time and a half pay for additional hours of work over 40. They are entitled to 26 days of leave annually as well as additional time for sick leave. Federal positions are divided into five groups: clerical, administrative, and fiscal; professional; sub-professional; crafts, protective, and custodial; and clerical-mechanical. Within each group are a number of grades with a salary level attached to each grade.

War veterans are given certain preferences in the civil service. They are given extra points on examinations and have prior right to a job in the case of reductions of personnel.

In addition to the Federal civil

service there are over 800 merit systems in states and municipalities. These employ over three million persons. Employment in most of these systems is limited to bona fide residents of the jurisdiction.

Tennessee Valley Authority

The Tennessee Valley Authority was created by an act of Congress in 1933. It took over nitrate plants and a dam already existing at Muscle Shoals, Alabama; created 18 new dams; and operates today in 41,000 square miles of watershed, drained by the Tennessee River, in 7 states: Tennessee, Kentucky, Virginia, Alabama, Georgia, North Carolina, and Mississippi.

The original purposes of the T.V.A. were to achieve (1) a 650-mile navigation channel for boats of 9-foot draft; (2) control of flood waters on the Tennessee and lower Ohio and Mississippi rivers; and (3) generation of electric power. All three of these purposes are being substantially achieved.

During recent years the T.V.A.'s dams, steam plants, chemical plants, huge power transmission system, research laboratories, navigation channel, and 30,000 employees were enlisted in war production.

The T.V.A. power-generating system, one of the largest in the world, has an installed capacity of 1,636,000 kilowatts.

NATIONAL BUILDINGS AND MONUMENTS

The White House

The White House, home of the President in Washington, D. C., comprises the mansion, the Executive Office, and the east and west terraces, and is situated between the State Department and Treasury Buildings on Pennsylvania Avenue. It was the first public building constructed in Wash-

ington. The first cornerstone was laid in 1792, and the first occupant of the house was President John Adams. British troops burned the building in 1814. The work of repairing the damage was completed three years later during the administration of President Monroe, and the south and north porticos were later added to the structure. The main building, containing 4 floors, is ap-

proximately 170 feet long and 85 feet in width. The wing at the east end of the East Terracc was built, following the declaration of war, in 1942; it is the principal entrance for visitors. The Executive Office, at the west end of the West Terrace, consists of three stories and was erected in 1902.

The classic style of architecture used in designing the White House was suggested by the Duke of Leinster's palace in Dublin, and the site was chosen by Major L'Enfant, the French engineer who planned the city of Washington. The outside walls of the White House are of light grey sandstone, painted white during the reconstruction after the fire. The mansion contains the East Room, the Green Room, the Blue Room, where the President receives foreign diplomats and guests at dinners or receptions, the Red Room, and the State Dining Room, which can seat 100 persons.

The Capitol

The Capitol building in Washington, D. C., is located on a plateau 88 feet above the level of the Potomac River. The structure is 751 feet long; 350 feet wide including approaches; and 287 feet, 5½ inches high from the base line of the east front to the top of the Statue of Freedom. This statue, surmounting the 8,909,200-pound iron dome, is of bronze and was placed in its present position in 1863. The grounds, which cover 120.2 acres, were once inhabited by the Powhatans—a sub-tribe of the Algonquin Indians. The southeast corner of the original building was laid by George Washington in 1793. The north wing was completed in 1800, the south wing eleven years later. In 1814 British troops burned the interior of both, but the damage was soon repaired. President Fillmore laid the cornerstone of the extensions in 1851, and the House and Senate moved into their larger quarters in 1857 and 1859 respectively.

Library of Congress

The Library of Congress, founded by an Act of Congress in 1800, occupies two buildings opposite the United States Capitol at Washington, D. C., and contains 414 miles of bookshelves as well as 20 reading rooms. Included in this vast collection are numerous rare volumes, the Division of Manuscripts, a law library of 500,000 books and pamphlets, the Music Division, which administers the Archive of American Folksong, an aeronautics library ranking as the largest in the world, the Fine Arts Division, the Pictorial Archive of Early American Architecture, 100,000 bound volumes of United States and foreign newspapers, and the Copyright Office. Parts of the main collection are housed in the Capitol and in the office buildings used by the Senate and House of Representatives. The Library was burned by British forces during the War of 1812, and was established again three years later with the purchase of Thomas Jefferson's library.

Washington National Monument

The Washington National Monument, a tapering white marble shaft erected at Washington, D. C., by the Washington National Monument Society, is 555 feet, 5⅞ inches high; 55 feet, 1⅞ inches square at the base and weighs 81,120 tons. The work of construction was begun in 1848 and completed in 1864, but the public was not admitted until 1888. The 3,300-pound capstone is crowned by a pyramid of pure aluminum. The walls of the monument's interior contain memorial stones presented by foreign countries, states, cities, and organizations. The monument is visited by an average of one million persons annually. The observation platform, reached by an elevator, has eight small windows (two on each side) and affords a remarkable panoramic view of the city.

Lincoln Memorial

The Lincoln Memorial, a white marble structure in Potomac Park, Washington, D. C., is about 80 feet high, with a base of three enormous steps. The cornerstone was laid in 1915, and the building was dedicated to the memory of Abraham Lincoln in 1922. The most notable feature is a statue of Lincoln sculptured by Daniel Chester French. It is 19 feet high from head to foot, rests on a pedestal 10 feet high, 16 feet wide, and 17 feet deep, and faces the Washington Monument and the Capitol. The walls are enclosed by a colonnade containing 38 columns 44 feet in height and 7 feet 5 inches in diameter. The interior, with a ceiling 60 feet above the floor, is divided into three chambers by Greek Ionic columns. Two murals by Jules Guerin, each 60 feet long and 12 feet high, express allegorically Lincoln's principles. On the north wall to the right of the statue is inscribed his Second Inaugural Address, while on the south wall is the famous Gettysburg Address.

The Thomas Jefferson Memorial

The Thomas Jefferson Memorial in East Potomac Park, Washington, D. C., was dedicated in 1943 by President Roosevelt. Constructed entirely of marble and surrounded by an Ionic colonnade and portico, the circular building is 165 feet in diameter and

103 feet high. The Pantheon architecture is a modification of the original design by John Russell Pope and his associates. A central chamber, 80 feet in diameter, contains a huge statue of Jefferson as well as four panels on which are inscribed quotations from the Declaration of Independence and his other writings.

Independence Hall and the Liberty Bell

Independence Hall, formerly known as the State House and located in Independence Square, Philadelphia, is connected by two arcades with the Wings or Province Halls, Congress Hall, and the Court House. The construction of these buildings was begun in 1732 and completed in 1759. In the State House the Declaration of Independence was signed by the Continental Congress in 1776, and the U. S. Constitution was drawn up there by the Convention in 1787. The famous Liberty Bell, cracked during its first testing in 1752, weighs 2080 pounds and is one of the most notable historical relics in the country; it was placed in the State House in 1753. Independence Hall, which was opened as a National Museum in 1876, contains the National Portrait Gallery as well as a remarkable collection of manuscripts, currency, maps, furniture, and other articles.

THE NATIONAL PARKS

Acadia. A national park covering 24,629 acres, was established in 1919 on Mount Desert Island, and comprises a group of granite mountains separated from the Maine coast by Frenchman's Bay.

Bryce Canyon. In southwestern Utah, is the site of a national park established in 1928 and covering 35,960 acres; the canyon is famed for the striking colors of its numerous oddly shaped pinnacles.

Carlsbad Caverns. In southeastern New Mexico, occupy a tract of approximately 720 acres and are a portion of a national park established in 1930 and covering 45,647 acres. The most notable of the caverns, which were formed by the action of water on beds of rock salt, gypsum, and limestone, is called the By Room; this is over half a mile in length and about 400 feet wide, containing a remarkable variety of stalactites and stalagmites.

Crater Lake. In southwestern Oregon, is the site of a national park established in 1903 and covering 160,213 acres. The lake is a remarkable shade of blue, lying in the crater of an extinct volcano; the sides of the latter are from 500 to 2,000 feet in height and present striking lava formations.

Glacier. In northwestern Montana, established as a national park in 1910 and covering 965,759 acres, is in a mountainous region that contains over 200 lakes fed by glaciers, as well as numerous deep precipices.

Grand Canyon. In northern Arizona, one of the world's great scenic wonders, is the site of a national park which was established in 1919 and covers 56 square miles. Formed by the action of the Colorado River on the plateau, the canyon is about 200 miles long in the deeper section, and from eight to ten miles wide. The highest altitude is 8,000 feet at the farther rim to the north. Presenting a brilliant variety of colors, the rocks are of limestone, shale, and sandstone; while the narrow inner canyon is carved 1000 feet into the underlying granite.

Grand Teton. In northwestern Wyoming, a national park established in 1929 and covering 94,853 acres, includes the most impressive part of the Teton Mountains.

Great Smoky Mountains. In North Carolina and Tennessee, are the site of a national park established in 1930, covering an area of 462,224 acres notable for their extensive forests.

Hawaii. The site of a national park established in 1916 and covering 173,384 acres, is in volcanic areas which contain Mauna Loa and Kilauea, active volcanoes, and Haleakala; the latter is extinct and is located on the island of Maui.

Hot Springs. In Arkansas, established as a national park in 1921, covers 911 acres and is visited yearly by 125,000 or more persons drawn by the curative value of its radio-active waters. The latter spring from the base and west slope of Hot Springs Mountain, have an average daily flow of 826,000 gallons, and maintain a uniformly high temperature of 135°F.; the water is made radio-active by a gaseous radium emanation.

Isle Royale. In Michigan, was established as a national park in 1940 and covers an area of 133,838 acres; the island is the largest in Lake Superior, composed mainly of forested wilderness.

Kings Canyon. In California, was established as a national park in 1940, covering an area of 453,559 acres of Sierra wilderness which contain many peaks—the highest being 14,000 feet—and giant sequoias.

Lassen Volcanic. In northern California, established as a national park in 1916 and covering 101,840 acres, is the site of the sole recently active volcano in the United States. Lassen Peak rises to a height of 10,453 feet, while Cinder Cone is 6,913 feet high; numerous mud geysers and hot springs are also contained in the park.

Mammoth Cave. In southwest Kentucky on the Green River, was made a national park in 1926, and is in a large section of limestone caverns occupying approximately 8,000 square miles. The five levels in Mammoth Cave contain numerous huge chambers connected by passages, the latter extending at least 150 miles, while a great portion is still unexplored. Discovered by white men before 1800, the

cavern was used for mining saltpeter during the War of 1812.

Mesa Verde. In southwestern Colorado, became a national park in 1906, covers 51,023 acres, and contains the most perfectly preserved prehistoric cliff dwellings in the country.

Mount McKinley. In south central Alaska, is the highest peak in North America, and in 1917 was made the site of a national park covering an area of 1,939,024 acres.

Mount Rainier. In west central Washington, comprises the largest single peak glacier system and in 1899 was made the site of a national park covering 239,303 acres. The 28 glaciers, some of which are 500 feet in thickness, occupy more than 40 square miles.

Olympic. In northwest Washington, was established in 1938 as a national park covering 845,992 acres and is noted for its forests and many glaciers; it serves as a summer feeding ground for herds of elk.

Platt. In southern Oklahoma, was made a national park in 1906, and covers 912 acres containing many cold mineral springs.

Rocky Mountain. A national park in northern Colorado, was established in 1915 in the heart of the Rockies and covers 252,626 acres containing peaks from 11,000 to 14,255 feet in height.

Sequoia. In eastern California, was established as a national park in 1890 and covers 385,100 acres, which include Mount Whitney and Kern River Canyon as well as numerous gigantic sequoias. The largest of the latter is the General Sherman Tree, 36.5 feet in diameter and 274 feet in height.

Shenandoah. In northwestern Virginia, was established as a national park in 1935 and covers 193,473 acres, which comprise an impressive scenic portion of the Blue Ridge Mountains.

Wind Cave. In South Dakota, became a national park in 1903 and covers 12,640 acres; the cavern is of lime-

stone, with several miles of galleries as well as many large chambers that contain fantastic formations.

Yellowstone. The oldest and largest national park in the United States, was established in 1872, lying on the Continental Divide on a plateau of the Rocky Mountains in northwest Wyoming, and portions of Idaho and Montana. Traversed by the Yellowstone River, the entire area covers 3,426 square miles and contains numerous geysers as well as hot springs which give evidence of the region's volcanic nature. The wild animals, birds, and plant life are protected by law. Among the scenic marvels of the park are petrified forests and Yellowstone Falls and Canyon. The walls of the latter are brilliantly colored.

Yosemite. In east central California, was established as a national park in 1890 and comprises 1,162 square miles in the famed Yosemite Valley, which lies on the west slope of the Sierra Nevada. The park contains numerous lofty peaks, the highest being South or Half Dome (5,000 feet) and Glacier Point (3,000 feet); the largest of the many falls is Yosemite Falls with a drop of more than 2,500 feet in three cascades, while others include the Bridal Veil, Vernal, and Nevada Falls. Thickly forested, the area is to a great degree covered with sequoia, pine, spruce, maple, oak, and pine trees.

Zion. In southwestern Utah, was established in 1919 as a national park covering 94,201 acres, which contain Zion Canyon; this famous gorge is from 1,500 to 2,500 feet deep and is one of the scenic wonders of the state.

National Historical Parks

Abraham Lincoln. In Kentucky, was made a park in 1939, containing a memorial building which covers the log cabin thought to be the birthplace of Lincoln.

Chalmette. In Louisiana, was made a park in 1939, and comprises a por-

tion of the ground on which the Battle of New Orleans was waged.

Colonial. In southeastern Virginia, became a park in 1936, and covers 11 acres including the major part of Jamestown Island, where the first permanent English settlement was made in the United States; Yorktown, where Cornwallis surrendered; and a parkway that connects these as well as other historic sites with Williamsburg.

Morristown. In New Jersey, made a park in 1933, served as the principal camp site of George Washington's forces during the winters of 1776 and 1777. It also served as a hospital for the Colonial army during the entire Revolutionary War.

NATURAL BRIDGES

In Utah is the largest natural bridge in the world, the Rainbow Bridge—formed of pink sandstone and extending 278 feet from pier to pier. The distance from the bottom of the canyon to the top of the arch is 309 feet. The Edwin or Rock Mound Bridge, at Natural Bridges National Monument in Utah, has a span of 194 feet and is 108 feet high. One of the most famous of these marvels of nature extends 90 feet across Cedar Creek in Virginia, at an altitude of 215 feet. Other notable natural bridges include the one at Rockbridge in Hocking County, Ohio, and another in Wolfe County in Ken-

tucky—spanning a mountain chasm 40 feet in height and 60 feet wide.

WONDERS OF PLANT LIFE

Among the most remarkable of natural wonders in the United States are plants that cat bugs. Venus' fly-catcher (*Dionaea muscipala*), a variety found on the coast of North and South Carolina, has two-lobed leaves with sensitive hairs that cause the lobes to close and imprison any insect which happens to light on them. Digestion is accomplished by means of an acid juice. Other plants, such as the *Droserophyllum* (one of the *Droseraceae*) in Portugal, possess long glandular tentacles that extend from the leaves and bend over to clutch their prey.

The largest trees in the world are the great sequoias in California. Sequoia National Park contains about 8,720 of them, including the General Sherman Tree, which is more than 36 feet thick and reaches an over-all height of 274 feet. At Yosemite National Park is the noted Wawona tree through which an automobile can be driven; sequoia groves are also found at Kings Canyon National Park in the Sierra wilderness, and at General Grant Park. Petrified forests, consisting of cedar and pine trees that have been turned to solid stone, cover many acres in Arizona, Washington, and Yellowstone National Park in Wyoming.

NATIONAL INSTITUTIONS

Smithsonian Institution

The Smithsonian Institution in Washington, D. C., was founded by Congress in 1846 under a bequest of James Smithson, and is noted for its scientific researches. The Institution's own income is largely supplemented by grants from the government. The board of regents consists of the Vice President of the United States, three Senators, three members of the House

of Representatives, and six citizens; the secretary of the board serves as executive officer and as keeper of the National Museum, which is one of the Smithsonian's many departments. Included among the latter are the National Research Council, the Astrophysical Observatory, the Bureau of Ethnology, the International Exchange Service, the National Collection of Fine Art, and the National Zoological

Park. Thirteen series of scientific periodicals are published by the Institution, and its main library contains 900,000 volumes principally devoted to science.

The American Red Cross

The American Red Cross, an organization devoted to the relief of suffering humanity and supported by popular subscription, was founded in 1881 by Clara Barton. Under government supervision since 1905, the society maintains its national headquarters at Washington, D. C. The President of the United States is the ex officio president of the American Red Cross. In 1944 Basil O'Connor was appointed as Chairman of the Central Committee, which conducts the Military and Naval Welfare Service, the Blood Donor Service, the Volunteer Special Services with an enrollment of over 3,000,000 women, the Home Nursing Program, the Medical and Health Service operated in conjunction with the Disaster Relief Service, and the Inquiry Service aided by the International Red Cross Committee at Geneva in maintaining contact between persons in the United States and their relatives or friends in enemy-occupied territory in wartime.

Franklin D. Roosevelt Library

The Franklin D. Roosevelt Library in Hyde Park, N. Y., dedicated to the service of the country by President Roosevelt in 1943, is administered by the Archivist of the United States. Contained in the U-shaped building are the papers of President Roosevelt and his associates, as well as a museum exhibiting ship models, pictures, old vehicles, and other articles which reflect American enterprise. An adaptation of Dutch Colonial architecture, the library was erected at a cost of \$350,000.

National Foundation for Infantile Paralysis

The National Foundation for Infantile Paralysis, located at 120 Broadway, New York City, was organized in 1938 as a non-profit membership corporation sponsored by President Roosevelt. The funds for its fight against infantile paralysis are derived from contributions during the March of Dimes, a campaign held each January in honor of President Roosevelt's birthday. Half the money donated is used for a national program of epidemic aid, while the remainder goes to the Foundation's many chapters throughout the world.

LAWS, REGULATIONS, AND SERVICES

Citizenship and Naturalization

Naturalization is the legal process of making a United States citizen out of an alien. Aliens in the United States are not forced to become citizens, but those who intend to reside here permanently will find it to their advantage to get their naturalization papers.

Aliens are not eligible for old age assistance in some states; they cannot vote, and many positions in public and private employment are barred to them.

Under the 1940 alien registration act, all aliens aged 14 and over residing in the United States must register and have their fingerprints taken. They

must report each change of address to the United States Department of Justice. The only aliens not required to register are foreign diplomats and members of their families. An alien who leaves the United States to visit a foreign country (including Canada and Mexico) must have a re-entry permit from the Commissioner of Immigration in Washington, D.C. This permit costs three dollars and takes several weeks to obtain; a new one is required for each visit to a foreign country. Canadians or Mexicans living in the United States cannot return from a visit to their native countries without re-entry permits or passports.

How to Become a Citizen. The first step is to find out where to apply for your papers. If you live in or near a large city, look in the telephone directory under "U.S. Government" and the heading "Department of Justice," or "Justice Department," or "Immigration and Naturalization Service," or "Naturalization Service." If there is no such office in your city or in a nearby large city, apply to the clerk of the nearest federal or state court—usually in the county court house. If you arrived in the United States after June 29, 1906, your next step is to get a certificate of arrival. Aliens who arrived on or before June 29, 1906 do not need this certificate, but they must prove that they were residents in the United States on or before that date, and that they have lived continuously in the United States since they arrived. The following are useful in proving arrival and continuous residence: a letter from the steamship line stating that the alien was a passenger on board the ship, dated business or personal letters, school reports, marriage certificates, tax receipts, life insurance policies, and similar documents. Aliens who were living here when the 1900 census was taken can sometimes get evidence of residence and age at that time from the Census Bureau. A census

age application blank can be obtained from Immigration and Naturalization Service, Washington, D. C. Aliens who cannot prove that they resided in the United States before June 30, 1906, should ask about getting a record of registry.

The declaration of intention is often called "first papers." The following aliens do not need to make a declaration of intention, but can apply directly for their final papers: aliens who married American citizens on or before September 22, 1922, or whose spouse became a citizen after September 21, 1922; aliens who made the mistake of exercising the rights of citizenship during the 5 years preceding July 1, 1920, or prior to that time, because of misinformation regarding citizenship status. Aliens who are 18 years of age or over, and who entered the United States as legally admitted immigrants—may apply for first papers. Application may be made in a naturalization office, or in the office of a clerk of a state or federal court, or in the offices of organizations that help aliens to become citizens.

Application form A-2213 is used when making a declaration of intention. No witnesses are needed, but the following information will be required: occupation, height, weight, color and other identifying description, the name of the foreign port at which the alien boarded a ship for the United States, the name of the ship, the place and date of arrival in this country, and the place of last foreign residence. In filling out the form, the alien should use the name he used when he came to the United States, and should spell it exactly as it was spelled when he applied for passage. If the name has since been changed, both names must be given. The petition for final papers may include a request for a change of name. Two photographs of the applicant signed by him, and a money order for \$2.50 payable to the Commissioner

of Immigration and Naturalization, must be presented or mailed with the applications. The office where the alien obtains his application form will give him all the further information he will need in regard to the record of registry, second or final papers, oath of allegiance, and other requirements.

Who is a Citizen? All persons (including Chinese, Filipinos, Indians, and Japanese) born in the United States, Hawaii, Alaska, Puerto Rico, or the Virgin Islands are citizens of the United States by reason of their birth. The only exceptions are children born here to parents in the diplomatic service of a foreign government. American women who married aliens eligible for naturalization before March 2, 1907, did not lose their citizenship if they continued to reside in the United States, and any American woman who married an alien eligible for naturalization after September 21, 1922 is still a United States citizen. Foreign born women who married American citizens before September 21, 1922, automatically became citizens by reason of their marriage.

Both parents must be citizens before their foreign-born children can claim citizenship. However, a foreign-born child under 21 years of age, whose parent became a naturalized citizen before 12 o'clock noon (Eastern Standard Time) May 24, 1934, automatically became a citizen through the naturalization of the parent. Persons born in foreign countries or on the high seas to United States citizens who were visiting or temporarily living abroad at the time, may claim citizenship. Their births should be registered with the nearest American consul.

Passport Regulations

The State Department of the United States issues passports in time of peace to any eligible person who wants to travel in foreign countries. When properly made out and visaed (or vali-

dated) by United States consular agents in the countries to which the owner travels, the passport guarantees him the protection of his own government. No passport that has previously been issued may be used unless it is first submitted to the State Department.

A passport is normally good for two years from the date it is issued—if not limited to a shorter time—and the holder can renew it after this period by paying a fee of five dollars. One dollar is charged for executing applications for passports. These applications must be written before a clerk of the federal or state court, or a passport agent. A citizen who was born in this country is required to submit a birth certificate, or a certified copy of one; if neither of these is available, a certificate of baptism or a written affidavit by a relative or the physician who attended the birth may be used. An affidavit by a person of good repute (not related to the applicant) can also serve the purpose.

A naturalized citizen must state on his application the date when he arrived in this country, the name of the court where he was naturalized, and the date when he received his certificate. The naturalization certificate must be submitted with the application. A national—a person who lives in the United States but is not an American citizen—must furnish proof that he does not owe allegiance to any foreign nation.

All applications for passports must be accompanied by duplicate photographs of the applicant. These must be taken within six months of the time that they are submitted, and should be no larger than 3 by 3 inches, and no smaller than 2½ by 2½ inches. They cannot be mounted and must be printed on thin paper with a light background; the complete front view of the applicant's face is required. A professional photographer should take these pictures, since snapshots, maga-

zine or newspaper photographs cannot be submitted.

The witness who signs the application must state his occupation as well as his business address. No one will be accepted as a witness to a passport application if he has been paid (or expects to be paid) for this service. A woman who applies for a passport is required to state whether she has ever been married, and a married woman must sign her own given name in addition to the family name of her husband.

Unless authorized by the U.S. Department of State, American consuls abroad are not permitted to issue passports to persons who claim to be United States citizens, but whose claims may be questioned. In certain cases of emergency, the consuls may issue a passport to a citizen who does not already possess one—even if his registration at the consulate is invalid at the time his passport application is filed.

A passport obtained by the head of a family may include the members (of his immediate family) who are under twenty-one years of age. Those who are twenty-one or older must have separate passports and must apply for them in person. Individuals who were born in a foreign country after May 24, 1934, and before January 13, 1941, of an American mother or father who had previously lived in the United States, are allowed to submit an affidavit as evidence of the citizenship of either one of their parents.

United States Copyright Laws

Under the Act of 1909, copyright registrations apply for a period of 28 years and may be extended, upon application, for a second term of 28 years. Copyright may be secured for unpublished works such as lectures, sermons, dramatic compositions, works of art, and motion picture photoplays; or for published works such as books,

maps, prints, and periodical publications. In the case of unpublished works one copy or model of the work to be copyright must be deposited with the Copyright Office in Washington, D.C. The fee for copyright on unpublished works is one dollar. In the case of published works, two copies of the work must be deposited with the Copyright Office. The fee is two dollars.

As to foreign rights, while the United States is not a member of the international copyright union, a number of foreign countries have agreed to give protection to American authors under reciprocal agreements with the United States government. By Presidential proclamation, copyright relations have been established with Austria, Belgium, Chile, Costa Rica, Cuba, Czechoslovakia, Denmark, Finland, France, Germany, Great Britain and the British possessions, Italy, Luxembourg, Mexico, the Netherlands and Dutch possessions, Norway, Poland, Rumania, Spain, Sweden, Switzerland, Thailand, and Tunis.

United States Patent Laws

A patent gives the holder the exclusive right to make, use, or sell his invention for a period of 17 years. Application for patent rights should be addressed to the Commissioner of Patents, Washington, D. C. The application should contain a full and clear description of the invention, and should enumerate exactly which parts of the invention are claimed as new by the applicant. If possible, drawings made by a skilled draftsman should accompany the application. The fee for filing a patent is \$30.

Social Security Laws

Under the Social Security Law of 1935 ten measures were enacted designed to promote the security of the American people. Five of these provide for cash payments, the other five

provide for health and welfare services. Among the provisions of the law are:

Old-Age and Survivors' Insurance. Protects wage earners in industrial and commercial employment and their families when either death or old age ends their earnings. Monthly benefits directly related to their past wages are provided. The insurance fund is made up of contributions by employer and employee. At the present time each contributes one cent on every dollar earned, up to \$3,000 annually. Old-age, in the act, is considered as over 65 years of age. Excluded from the provisions of the act are agricultural and domestic workers, workers in non-profit institutions, and government workers.

Employment Security. Allows for job insurance and job placement under the joint operation of the federal and state governments. Persons who have lost their jobs may file a claim for unemployment insurance benefits at the local employment office and if no job is found for him he receives benefit payments after a waiting period of 2 or 3 weeks. The payments continue up to a maximum of 3 or 4 months. Rates of payment are determined by the states individually. Public employment offices register unemployed workers and try to find work for them free of charge.

Public Assistance. Aid to the needy aged, the blind, and dependent children is provided through federal and state cooperation. The Federal government matches the contributions of the states up to \$40 a month for the aged and the blind, and \$18 a month for the first dependent child in a home and \$12 a month for every other child.

Customs Regulations

Customs are taxes levied by any government on imports or exports, and are so called because in England these duties came to be considered the

Crown's right by custom. The two types of customs are as follows: specific duty, the tax levied in regard to the quantity of the goods—whether by number, weight, or measure; and the *ad valorem* duty, which is based on the value or cost of goods. These duties are collected by customs officers at the port of entry, and vary in rate according to the type of goods imported. Specific duties, which are usually applied to articles that are somewhat uniform in value and quality, are used mainly in Great Britain, France, Italy, and the United States.

The Constitution of the United States forbids the levying of any export duties, hence goods can be sent or taken out of the country without customs charges. There is an exception to this rule in the case of gold, however. All importations (including baggage) are usually examined at the pier or border, but if the articles are destined for a capital city, they may be sent there under bond—suitably sealed—and examined at the railway station. Hand baggage is often examined by customs officers on trains at borders. Residents of the United States returning to this country from abroad are permitted to bring in \$100 worth of personal effects, souvenirs, etc., free of charge.

Since 1922 the President of the United States has had the authority to alter customs rates within certain limits in order to meet shifting trade conditions. Customs were originally regarded as a source merely of revenue for the government, but they have since become a device for protecting home industries from foreign competition.

Postal Service

The U.S. Postal Service is one of the largest businesses in the world. As of May, 1943, it had about 43,000 post offices and employed 302,000 workers with an annual payroll of more than 600 million dollars.

The Post Office Department issues more than 20 billion ordinary postage stamps a year and carries more than 125 million special-delivery letters. Domestic airline service was established in 1918; the parcel post system in 1913. Every year the Department transfers more than 3 billion dollars through money orders. Its saving system has on deposit nearly \$1,600,000,000 belonging to nearly 3,200,000 depositors.

Post offices on wheels are maintained in 647 complete railway post-office cars and in 2,969 post offices within other railway coaches.

Many hundreds of special post offices were established at Army camps during the Second World War. In order to facilitate the sending of mail overseas the Department inaugurated V-Mail service. V-Mail letters are written on lightweight combination forms and envelopes, provided by the Post Office and occupying much less space than that occupied by ordinary letters. When still greater economy in shipping space was necessary, V-Mail letters were photographed on special film (microfilm) and sent abroad in that form. The addressee receives a photograph, about 4 by 5¼ inches, of the original message.

Lend-Lease

The so-called lend-lease program was organized in the United States in March, 1941, when the American people, though not yet embroiled in the European conflict, decided to supply the tools of war and other necessities to the Allied nations.

At first lend-lease exports went principally to the United Kingdom. From March, 1941, to Sept. 30, 1943, these exports were valued at \$5,624,000,000.

As the war spread, the area served by the lend-lease program constantly widened. Soon Russia, China, Africa, the Middle East, and Australia were included in this area.

The flow of goods to Russia began in the autumn of 1941. During the following year several thousand planes and \$3,284,000,000 worth of supplies were sent. Munitions constituted 56% of the total; industrial items 27%; foodstuffs 17%.

Aid to China, while seriously hampered by transportation difficulties, was provided in increasing amounts. In all, \$1,475,000,000 worth of supplies were sent to China, India, Australia, and New Zealand.

Lend-lease planes and tanks started leaving the United States for North Africa in the summer of 1942. More than 2 billion dollars worth of supplies were sent to Africa, the Middle East, and the Mediterranean area. The victories of Montgomery's Eighth Army in North Africa were in large part due to the 1,000 planes, the 20,000 trucks, and the many hundreds of tanks and pieces of artillery sent from America. In addition, planes were ferried and equipment was transferred to Giraud's forces.

Services rendered to the United Nations under the lend-lease plan included not only the sending of supplies but also the building of factories and shipyards in the United States to produce lend-lease goods; provision of shipping to carry the goods abroad; construction of bases; repair of Allied ships in U.S. dockyards; performance of supply services in the base areas abroad; and training of Allied air forces at U.S. bases.

The lend-lease program involved not only providing services but also receiving them. The United States received airfields, barracks, hospitals, food, and materials of all kinds for use by American soldiers stationed within the borders of the Allied countries. In November, 1943, President Roosevelt reported to Congress on reciprocal aid extended to the United States by the United Kingdom. He said that by June 30, 1943, the United States had re-

ceived \$1,171,000,000 worth of reverse lend-lease goods.

Lend-lease aid extended by the United States to the United Nations

from 1941 through August, 1945, totaled approximately forty billion dollars. Reverse lend-lease totaled approximately five billion dollars.

COMMERCE AND INDUSTRY

MONEY AND BANKING

United States Monetary System

Gold coins were withdrawn from circulation in March, 1933, and gold certificates—which had been issued against gold coin and bullion for greater convenience in handling—were also removed at the same time. Before this occurred, gold was issued in coins of \$2.50, \$5.00, \$10.00, and \$20.00 denominations. The United States Treasury contains \$156,039,431 in gold bullion as a reserve for government notes and Treasury notes of 1890.

Silver coins issued by the United States are the dollar, the 50 cent piece or half dollar, the quarter or 25 cent piece, and the dime or 10 cent piece.

There are two United States coins made of metals other than silver—the nickel or five-cent piece, composed of 25 per cent nickel and 75 per cent copper; and the penny or cent, containing 95 per cent copper and 5 per cent tin and zinc.

Four kinds of United States paper currency are in circulation: silver certificates, issued against deposits of silver or silver coins; national bank notes issued by national banks and guaranteed by the government; United States notes, also guaranteed by the government; and Federal Reserve notes, issued subject to the deposit of adequate security. Paper currency is issued in the following denominations, the face of the bills bearing the indicated portraits:

- \$1—Washington
- \$2—Jefferson

- \$5—Lincoln
- \$10—Hamilton
- \$20—Jackson
- \$50—Grant
- \$100—Franklin
- \$500—McKinley
- \$1000—Cleveland
- \$5000—Madison
- \$10,000—Chase

On June 30, 1944, the total amount of money in the United States was \$44,805,501,044. Of this sum, \$23,174,156,242 was held in the Treasury in the form of gold and silver, and the amount outside of the Treasury was \$26,315,874,464, with an estimated \$22,504,077,880 in circulation. The Treasury is allowed to sell free silver at \$0.7111 an ounce, but the allotments sold are limited to the surplus silver that is not needed to redeem silver certificates.

Appropriations by the Federal Government

Fiscal Year	Appropriations (in Dollars)	Fiscal Year	Appropriations (in Dollars)
1880	338,865,031.29	1927	4,409,463,389.81
1885	306,077,469.58	1928	4,211,011,352.58
1890	395,430,284.26	1929	4,633,577,973.85
1895	492,477,759.97	1930	4,665,236,678.04
1900	698,912,982.83	1931	5,071,711,693.56
1905	781,288,214.95	1932	5,178,524,967.95
1910	1,044,433,622.64	1933	5,785,252,641.95
1915	1,122,471,919.12	1934	7,692,447,339.17
1916	1,114,490,704.09	1935	7,527,559,327.66
1917	1,628,411,644.81	1936	9,306,520,504.31
1918	18,881,940,242.79	1937	10,380,975,796.61
1919	27,065,148,933.02	1938	10,192,826,025.92
1920	6,454,596,649.56	1939	12,118,036,335.68
1921	4,780,829,510.35	1940	13,349,202,681.73
1922	3,909,282,209.46	1941	19,072,002,450.61
1923	4,248,140,569.99	1942	60,294,585,348.60
1924	4,092,544,312.04	1943	150,766,364,730.48
1925	3,748,651,750.35	1944	113,705,377,682.37
1926	4,151,682,049.91		

Government Receipts and Expenditures

The Federal Government in 1944 spent more than twice as much as it received.

The total net receipts amounted to \$44,148,926,968, or \$319.92 per capita of the population.

The total expenditures were \$93,743,514,864, or \$679.29 per capita.

Customs and Internal Revenue Receipts

The receipts of the U.S. Government in 1944 from internal revenue were more than 9 times as large as the receipts from customs. The figures were: Internal revenue, \$41,684,987,330; customs, \$431,252,168.

Ten years before, in peacetime, the figures had been: Internal revenue, \$2,672,239,194; customs, \$313,434,302.

Federal Debt

If every individual living in the United States in 1944 had been called upon to pay his share of the public debt, his obligation would have amounted to \$1,448.56.

The total gross debt of the Federal Government in 1943 was \$136,696,090,330, or \$1,008.34 per capita of the population. By 1944 the indebtedness had risen to \$201,003,387,221, or \$1,448.56 per capita.

Money, Postage Stamps, and Internal Revenue Stamps

The Mint coined 2,114,890,662 pieces of money, with a face value of \$111,600,180.40, in the fiscal year ending June 30, 1942. Coinage plants are located in Philadelphia, Denver, and San Francisco. During the same year the Bureau of Engraving and Printing in Washington, D.C., turned out \$5,940,680,000 in new paper currency

plus approximately 20,500,000,000 postage stamps and 16,500,000,000 internal revenue stamps.

National Income

The total national income of the United States in 1943 was \$147,927,000,000, as compared with \$77,574,000,000 in 1940 and \$64,200,000,000 in 1938.

Agriculture received \$13,993,000,000 of total. Figures for other industrial divisions were: Mining (excluding oil and gas), \$2,460,000,000; manufacturing, \$44,332,000,000; transportation, \$9,548,000,000; retail and wholesale trade, \$17,424,000,000; government, \$25,126,000,000.

Viewed distributively, the national income in 1943 showed the following totals: Salaries and wages in private industry, \$80,024,000,000; salaries and wages in government agencies, \$22,024,000,000; dividends and savings of incorporated business, \$8,938,000,000; net income of proprietors, agricultural and other, \$23,893,000,000. These figures did not include subsistence to members of the armed forces.

The U.S. national income per capita in 1939 was about \$680. By 1943 it had reached about \$1,214.

Income Tax Collections

The total income-tax revenue of the U.S. Government in the year ending June 30, 1943, was \$11,150,783,698. Of this sum almost one-fifth (\$2,153,124,020) came from New York State. Pennsylvania contributed \$965,176,832; Illinois, \$931,284,071; Ohio, \$926,813,649; California, \$753,831,499. The smallest state revenue (\$11,462,395) came from South Dakota.

Deposits in United States Banks

Deposits in 5,060 national banks affiliated with the Federal Reserve Board amounted to \$54,589,000,000 during the year 1943. In 1,643 state

commercial banks, also Board members, deposits were \$29,427,000,000.

Deposits in 542 mutual and stock savings banks, not affiliated with the Board, were \$11,132,000,000. In 7,373 other banks (trust companies, private banks, etc.), also non-affiliated, deposits were \$12,076,000,000.

Total deposits in all 14,618 banks during 1943 amounted to \$107,224,000,000.

Pensions

Total disbursements for pensions in the United States in 1944 amounted to \$494,931,061.

Pensioners on the government roll, June 30, 1944, were classified as follows:

War of 1812—Widows, etc., 1.

War with Mexico—Widows, etc., 66.

Indian Wars—Soldiers, 1,278; widows, etc., 2,885.

Civil War—Soldiers and nurses, 383; widows, etc., 27,650.

War with Spain—Soldiers and nurses, 133,408; widows, etc., 67,148.

First World War—Soldiers, service connected, 337,311, non-service connected, 85,700; emergency, probationary, provisional, or temporary officers receiving retirement pay, 2,532; widows, etc., service connected, 87,545, non-service connected, 26,794.

Second World War—Soldiers, 209,348; retired reserve officers, 1,443; widows, 27,835.

Regular establishment—Soldiers, 42,987; widows, etc., 13,765.

The total numbers of pensioners were: Soldiers, 814,390; widows, etc., 253,689.

Social Security

In the first ten years of its existence the Social Security Board paid nearly \$8,750,000,000 in benefits to individuals and families, unemployed, the aged, and the blind. As of July 1, 1945, 1,285,000 persons were drawing old age and survivors' benefits.

Life Insurance

More than 140 billion dollars' worth of life insurance (exclusive of national service life insurance) was in force in the United States in 1943. Of this sum \$91,776,904,000 was in force in ordinary policies, \$25,571,118,000 in industrial policies, and \$22,960,661,000 in group policies.

The following sums were paid for life insurance in 1942: Ordinary, \$4,925,167,000; industrial, \$1,479,652,000; group, \$1,399,882,000. Total, \$7,804,701,000.

Living Costs in American Cities

The two periods, since the turn of the century, in which living in American cities has been most expensive have been the period around 1920, following the First World War, and the period from 1939, following American entrance into the Second World War.

The cost of retail food in cities in the United States rose 46.6% from August 15, 1939, to Dec. 14, 1943. The cities which felt the increase most were (in the order named) Norfolk, Savannah, San Francisco, New Orleans, and Cleveland.

If we take the years from 1935 to 1939 as an average period, we shall find:

In 1920 the average cost of clothing in large American cities was more than twice as much as its cost during the period 1935-39. In the same year the average price of food was 68.8% more, and the average rent was 20.7% more, than it was during the period specified.

In 1943 the average cost of clothing was nearly a third more than it was during the period 1935-39; the price of food was 38% more; and the average rent was 8% more.

Round steak cost an average of 13.2¢ per lb. in 1900; 39.5¢ in 1920; 36¢ in 1935; 43.9¢ in 1943.

Pork chops, bacon, and chicken fol-

lowed a similar pattern, while ham, which started at 16.2¢ per lb. in 1900, registered 56.2¢ per lb. in 1943.

A dozen eggs cost, on an average, 20.7¢ in 1900; 68.1¢ in 1920; 44.5¢ in 1930; and 57.2¢ in 1943.

The average price of milk was 6.8¢ per quart in 1900; 16.7¢ in 1920; and 15.5¢ in 1943.

The price of sugar remained almost stationary for 43 years. It started in 1900 at 6.1¢ per lb. and, except for 1920, was never lower than 5¢ or higher than 7¢. In 1920 it rose to 19.4¢ per lb.

Gainful and Employed Workers in the United States

The number of gainful American workers in 1940 was 53,299,000, 52.7% of the population 14 years and over, as compared with 48,595,000 in 1930, 54.5% of the population 14 years and over.

Males employed in 1940 were listed by the Bureau of the Census as follows: Professional and semi-professional workers, 1,892,640; farmers and farm managers, 4,996,780; farm laborers and foremen, 2,733,560; proprietors, managers, and officials, except farm, 3,326,540; clerical, sales, and kindred workers, 4,360,920; craftsmen, foremen, and kindred workers, 4,958,680; operatives and kindred workers, 6,195,780; domestic service workers, 145,920; protective service workers, 670,260; service workers, except domestic and protective, 1,526,240; laborers, except farm and mine, 2,971,720; occupation not reported, 323,400.

Females employed in the same occupations in the same year reached a total of 11,278,920, as compared with the total of 34,102,440 males.

The proportion of white male employees to non-whites was estimated as more than 10 to one; while the proportion of white female employees was estimated at more than 7 to one.

Of the labor force in March, 1944, 51.4% was in civilian employment and 10.8% was in the Armed Forces.

Organized Labor

There are about 53 million gainfully employed workers in the United States. About 14 million of this number belong to labor unions. The right of workers to organize and join unions of their own choice is protected by the National Labor Relations Act. The attempt of labor to organize in the United States dates back to the earliest days of the republic. In 1786 journey-men printers in New York tried to form an association of craftsmen, and in 1794 shoemakers followed suit. The first success at organization on a large scale came with the formation of the Mechanics' Union of Trade Associations in Philadelphia in 1827. This organization brought together workers of many crafts. By 1836 labor unions could claim a membership of 300,000. In this early period labor was trying to establish a universal 10-hour day and agitated for free public education and for universal suffrage. Up to the outbreak of the Civil War labor continued to press for political reform measures and made numerous, but not too successful, attempts to organize workingmen's parties. Concurrently labor tried to build up nation-wide associations of local labor unions. Successful national organizations were formed by printers, hat-finishers, machinists, molders, and blacksmiths.

Following the Civil War the objectives of labor unions shifted to emphasis on the immediate demands of the working man, such as shorter hours and higher wages. Meanwhile progress had been made in organizing nation-wide federations. In 1866 the National Labor Union was formed, which, at its peak, claimed a membership of half a million. This and similar organizations of the time were short-lived, but they paved the way for the

founding of the Knights of Labor in 1869. Organized by Philadelphia garment cutters, it was at first a secret society, but soon expanded on the basis of the one-big-union idea which would embrace all workers, skilled and unskilled, regardless of race, creed, or color. It aimed at the establishment of a cooperative society in which all classes could participate in a freer and fuller life. At its peak the Knights of Labor claimed a membership of 700,000. Internal difficulties and the fact that it achieved too few practical results led to its decline in the late 1880's.

Leadership in American labor then passed to a new organization, the American Federation of Labor. Founded in 1881 by leaders of unions of molders, cigar makers, printers, and iron workers, it set out to realize objectives less idealistic than those of the Knights of Labor. Its aims were to organize workers on the basis of the skill or craft on a national and international scale; to encourage the sale of union-label goods; to secure the passage of legislation of benefit to working people; and to encourage the establishment of a labor press in the United States. First, and for many years, under the leadership of Samuel Gompers and then of William Green, the AFL made steady progress in the achievement of its aims. By 1920 it had a membership of over 4 million. By 1943 this had grown to about 7 million members who were organized in 106 national and international unions and 1,440 local unions.

However, with the growth of mass production in many industries, workers in such industries could not be effectively organized on a craft basis. Opposing the idea of craft unionism as advocated by the AFL, were the proponents of industrial unions, which called for organization on a plant or industry basis, rather than on the skill or craft basis. Under this plan all the

workers in the rubber industry, for example, regardless of their particular skills or jobs, would belong to one union. The Industrial Workers of the World was founded on this basis and was active in the early part of this century.

The differences between the two types of unionization—craft vs. industrial—resulted, in 1935, in a split in the ranks of the AFL, and the formation by John L. Lewis, head of the United Mine Workers, of the Committee of Industrial Organizations (now the Congress of Industrial Organizations). In addition to organizing on an industrial basis, the CIO had these objectives: to bring about the effective organization of working men and women regardless of race, creed, color, or nationality; to extend the benefits of collective bargaining and to secure for the workers means to establish peaceful relations with employers by forming labor unions capable of dealing with management as organized today; and to secure legislation safeguarding the economic security and social welfare of American workers. The CIO has been most successful in organizing workers in the rubber industry (United Rubber Workers), the automotive and airplane industry (United Automobile Workers, the largest union in the country), and the steel industry (United Steel Workers). Many efforts have been made to bring the CIO and the AFL together in one large organization but they have so far been unsuccessful.

In addition to these major labor groups, there are a number of unaffiliated or independent unions, such as the Brotherhood of Railway Trainmen and the National Federation of Telephone Workers.

The history of labor in its struggle for the establishment of shorter working hours, better working conditions, and for higher wages has been marked by many bitter conflicts, involving, on

the part of labor, strikes, work stoppages, and boycotts, and, on the part of the employer, lockouts and blacklisting. Many of these conflicts resulted in bloodshed. Sharp labor struggles have occurred most frequently in periods of economic depression. During the Second World War strikes were, for the most part, avoided. Labor, at the outset of the war, pledged not to strike, and labor-management committees handled many grievances. If labor and management could not agree on wages, the matter was referred to the War Labor Board for settlement.

Paralleling the growth of labor unions has been the increase in laws favorable to unions and to working people. These include legislation on: unemployment insurance, old-age insurance, outlawing of the transportation of strike-breakers across state lines, establishment of a basic 40-hour week in businesses engaged in interstate commerce, establishment of a minimum wage for all businesses in interstate commerce, limitation on the labor of children.

Perhaps the most important law affecting labor unions is the National Labor Relations Act, also known as the Wagner Act, and often called labor's Bill of Rights. Under this law employees are assured the right to organize themselves into unions of their own choosing and to select representatives of their own choosing for the purposes of collective bargaining. It sets up machinery under which employees may vote secretly for their representatives. It makes unlawful those practices which abridge the right of collective bargaining.

In recent years labor has re-entered the political arena. In New York State the American Labor Party was established by labor organizations and other interested groups of citizens. In the 1944 elections it polled almost 500,000 votes. In other states labor organizations lend their support to candidates who are sympathetic to labor. This practice was carried out on a national scale in 1944 with the formation of the Political Action Committee by many CIO and some AFL unions.

AGRICULTURE

Most Important American Crops

Corn is the most important of all American crops, and is indirectly the most important source of human food. In 1943 the production of corn in the United States was 3,076,159,000 bushels. Most of this crop was fed to animals and came to the market as livestock products. The cash income directly received from corn by American farmers in 1943 was \$635,019,000. The total value of corn in the same year is estimated at \$3,439,268,000.

Cotton is the most important cash crop grown in the United States, second only to corn in total value. According to the figures of the U.S. De-

partment of Agriculture, the production of cotton lint in 1943 was 11,427,000 bales; of cottonseed, 5,116,000 tons. The cash income from cotton lint for 1943 was \$1,209,935,000; from cottonseed, \$202,218,000. The total value of cotton in the same year was thus \$1,412,153,000.

Wheat is the third most important American field crop. Its production in 1943 amounted to 836,298,000 bushels. The cash income from wheat in that year was \$825,389,000. Its total value was estimated at \$1,127,448,000.

Oats came next in importance, with a production in 1943 of 1,143,867,000 bushels, valued at \$151,039,000 cash and \$823,630,000 total.

Hay of both tame and wild varieties had a total value in 1943 of nearly a billion and a half dollars. The exact figure was \$1,487,893,000. Its cash value was \$162,455,000.

Truck crops, which include the common vegetables such as cabbage, string beans, peas, carrots, etc., brought in \$937,495,000 in 1943.

Potatoes of the white variety were sold for \$396,645,000 in 1943. Sweet potatoes had a cash value of \$58,827,000, a total value of \$148,216,000.

The tobacco crop in 1943 had a cash value of \$557,469,000.

Soybeans in the same year brought in \$296,088,000.

The total cash income from all crops in the United States in 1943 was \$7,903,478,000.

Fruits, Berries, and Nuts

The most valuable fruit crop in the United States in 1943 was oranges. Their total value was \$254,055,000.

The total value of apples grown in the United States in the same year was \$217,470,000.

The total value of other important fruits, and also of berries and nuts, was given by the Department of Agriculture as follows: Grapes, \$184,534,000; peaches, \$106,969,000; grapefruit, \$73,785,000; pears, \$59,805,000; prunes, \$56,370,000; lemons, \$34,312,000; walnuts, \$29,697,000; pecans, \$26,303,000; cherries, \$24,932,000; almonds, \$11,600,000. The cash income from strawberries was estimated at \$55,235,000. Peanuts brought in \$167,266,000.

The production of all varieties of oranges in 1943 was 96,290,000 boxes.

The production of all varieties of apples in 1938 was 231,158,000 bushels.

Production figures for other important fruits, berries, and nuts in 1943 were estimated as follows: Grapes, 2,790,000 tons; peaches, 42,060,000 bushels; grapefruit, 49,187,000 boxes;

pears, 24,511,000 bushels; strawberries, 7,161,000 crates; lemons, 14,274,000 boxes; walnuts, 66,340 tons; pecans, 59,280 tons; almonds, 16,000 tons.

The number of acres used in the cultivation of important fruits, berries, and nuts in the United States in 1943 was reported as follows: All apples, 1,375,000; commercial apples, 885,000; six other major fruits (peaches, pears, grapes, plums, prunes, apricots), 1,516,000; cranberries and strawberries, 152,000; planted nuts (almonds, walnuts, filberts, pecans), 570,000.

Farms in the United States

The number of farms in continental United States in 1940 was 6,096,799. This represented a decline of 351,544 from the number in 1920.

The value of farm land and buildings in 1940 was \$33,641,738,726, as compared with \$66,316,002,593 in 1920.

The total acreage of land, improved and unimproved, occupied by American farms in 1940 was 1,060,852,374, as compared with 955,883,715 in 1920.

The total harvested acreage of principal crops in 1943 was 347,498,000, as compared with 503,073,007 in 1920.

Texas is the state which contains the greatest number of farms. In 1940 the number was 418,002 and their money value was \$2,589,978,936. Mississippi in the same year contained the second largest number of farms—291,092. Next came North Carolina with 278,276 farms. Of the northern states, Ohio led with 233,783 farms. Illinois and Iowa came next, with almost equal numbers. The figure in Illinois was 213,439; in Iowa, 213,318. In the New England group, Maine contained 38,890 farms and Massachusetts 31,897.

Farms operated by full owners in 1940 numbered 3,084,138; by part owners, 615,039; by managers, 36,331; by tenants, 2,361,271; by croppers, 541,291.

Whites in 1940 operated 5,377,728 farms; non-whites, 719,071.

Size of American Farms

The characteristic American farm has generally been regarded as the middle-sized, or one-family, farm. Such a farm can be worked by the labor force of one family, with an occasional hired man. The tendency toward this type of farm is growing, as is shown by the facts that the large farms—those of above 1,000 acres—are diminishing in number, and that the small farms—those of under 100 acres—are diminishing. In other words, the tendency is toward the farm of 160 to 320 acres. The average size of farms in 1925 was 145 acres.

Decrease of Farm Population

The farm population of the United States in 1940 was estimated by the Bureau of the Census at 30,475,206, as compared with 30,445,350 in 1930 and 31,614,269 in 1920. During this 20-year period the population of the United States as a whole increased from 105,710,620 to 131,669,275.

In 1940 the number of male farmers and farm managers was 4,996,780 (4,341,040 whites, 655,740 non-whites) and of farm laborers and foremen was 2,733,560 (2,119,020 whites, 614,540 non-whites). In the same year the number of female farmers and farm managers was 164,160 (114,520 whites, 49,640 non-whites) and of female farm laborers and foremen was 320,000 (118,640 whites, 201,440 non-whites).

The number of men from 18 to 34 living on farms decreased from 4,143,000 in April, 1940, to an estimated 2,250,000 in April, 1944, or 46%. The major part of the decrease was the result of inductions into the armed forces, but a considerable proportion of it was due to the movement of young men from farms to take jobs in industry.

Average Agricultural Prices

The price of corn fell as low as 19.1¢ per bushel in 1933. It rose to \$1.06 in 1936 and to \$1.13 in 1944.

The price of cotton in 1933 was 5.6¢ per lb. In 1936 the price was 11.1¢ and in 1944 was 20.15¢.

The price of wheat in 1933 was 32.9¢ per bushel; in 1936 was 92¢; and in 1944 was \$1.46.

Hogs were sold in 1944 for \$12.80 per 100 lbs., as compared with \$2.68 in 1933 and \$5.18 in 1940.

Beef cattle were sold in 1944 for \$11.40 per 100 lbs., as compared with \$3.28 in 1933 and \$6.68 in 1939.

A milch cow in 1944 was worth, on the average, \$108, as compared with \$30.99 in 1934 and \$81.70 in 1942.

A horse in 1944 was worth, on the average, \$79.70, as compared with \$56.25 in 1932 and \$92.70 in 1936.

Farm Income from Livestock

American farmers in 1943 received \$2,559,552,000 for cattle and calves. This sum is almost a quarter of the total cash income received from the sale of animals and animal products.

The income from the sale of hogs was \$2,953,311,000; from the sale of sheep and lambs, \$343,611,000; from the sale of poultry, \$1,028,596,000.

Eggs were sold for \$1,423,433,000.

Dairy products were sold for \$2,804,078,000.

Wool was sold to the value of \$159,953,000.

The total cash receipts from the sale of animals and animal products were \$11,348,695,000.

Farm Income and Government Payments

Iowa in 1943 received a larger cash income from crops and livestock than that received by any other state. The figure was \$1,574,059,000. California came second with an income of \$1,502,917,000; Texas third, with

\$1,163,920,000; and Illinois fourth, with \$1,146,626,000.

During the same period Illinois received larger government payments than those received by any other state. The figure was \$58,062,000. Texas came second, with receipts from the government of \$54,311,000; Iowa third, with \$51,335,000; and Kansas fourth, with \$42,007,000.

Value of Farm and Forest Products

Wheat and other field crops harvested on American farms in 1939 were valued at \$2,470,727,331; vegetables, \$199,526,002; fruits and nuts, \$295,350,985; horticulture special products, \$129,345,003; forest products, \$39,151,613. Farm products used by farm householders were valued at \$1,132,063,275.

Farm Mortgages

Foreclosures of mortgages on American farms were more than 16 times as numerous in 1936 as they were in 1943. The 13,571 foreclosures of 1936 involved a money value of \$41,994,962 and amounts delinquent of \$270,647,152. (According to the definition of the U.S. Farm Credit Administration, "amounts delinquent" means unpaid principal balance of loans having delinquent installments.)

In 1939 there were 10,567 foreclosures involving a money value of \$38,000,220 and amounts delinquent of \$404,198,496.

In 1943 there were 805 foreclosures involving a money value of \$2,729,462 and amounts delinquent of \$106,136,288.

The total farm mortgage debt of the United States was \$5,634,772,000 in 1944, as compared with \$9,630,768,000 in 1930.

Farm Wages

Average monthly wages paid by American farmers in 1943 were higher

than in any previous year. They were \$61.91, including board; \$72.85, excluding board.

The average monthly wage in 1930 was \$37.59, including board; \$48.10, excluding board.

The average monthly wage in 1920 was \$51.73, including board; \$65.40 excluding board. In the same year, however, the average daily wage was slightly higher than that paid in 1943. The figures were: \$2.98, including board; \$3.46, excluding board.

The average daily wage in 1943 was \$2.87, including board; \$3.27, excluding board.

Tenant Farming

Almost two-fifths of the farms of the United States are operated by tenants, and the number is increasing. The percentage of tenancy is highest in the South among the Negroes. In the Middle West, where the purchase-price and capital necessary to operate a farm are high, there is also widespread tenancy. According to official figures, 53% of the farms in the west south central states are operated by tenants. Only 7% of the farms in New England are so operated. The number of farms operated by tenants increased from 25.6% of the total number of farms in 1880 to 35.3% in 1900 and to 38.1% in 1920.

Farmers' Cooperatives

Farmers' marketing and purchasing cooperatives in Minnesota are organized in 1,399 associations, have 358,600 members, and do an annual business of \$336,500,000. This is the most impressive showing made by any American state in the cooperative field.

Wisconsin has the second largest number of cooperatives, with 1,105 associations, 234,800 members, and an annual business of \$202,940,000.

Dairy products lead among the commodities handled, followed by (1) live-

stock and (2) grains, dry beans, and rice.

The volume of business handled by farmers' cooperatives is increasing. In

the marketing season of 1939-40 the total estimated business was \$2,087,000,000. In 1942-43 the figure had risen to \$3,780,000.

STATE AGRICULTURAL EXPERIMENT STATIONS

ALABAMA—Auburn
ALASKA—College
ARIZONA—Tucson
ARKANSAS—Fayetteville
CALIFORNIA—Berkeley
COLORADO—Fort Collins
CONNECTICUT—State Station, New Haven; Storrs Station, Storrs
DELAWARE—Newark
FLORIDA—Gainesville
GEORGIA—State Station, Experiment; Coastal Plain Station, Tifton
HAWAII—Honolulu
IDAHO—Moscow
ILLINOIS—Urbana
INDIANA—Lafayette
IOWA—Ames
KANSAS—Manhattan
KENTUCKY—Lexington
LOUISIANA—Baton Rouge
MAINE—Orono
MARYLAND—College Park
MASSACHUSETTS—Amherst
MICHIGAN—East Lansing
MINNESOTA—University Farm, St. Paul
MISSISSIPPI—State College
MISSOURI—College Station, Columbia; Fruit Station, Mountain Grove
MONTANA—Bozeman
NEBRASKA—Lincoln

NEVADA—Reno
NEW HAMPSHIRE—Durham
NEW JERSEY—New Brunswick
NEW MEXICO—State College
NEW YORK—State Station, Geneva; Cornell Station, Ithaca
NORTH CAROLINA—State College Station, Raleigh
NORTH DAKOTA—State College Station, Fargo
OHIO—Wooster
OKLAHOMA—Stillwater
OREGON—Corvallis
PENNSYLVANIA—State College
PUERTO RICO—Mayaguez
RHODE ISLAND—Kingston
SOUTH CAROLINA—Clemson
SOUTH DAKOTA—Brookings
TENNESSEE—Knoxville
TEXAS—College Station
UTAH—Logan
VERMONT—Burlington
VIRGINIA—College Station, Blacksburg; Truck Station, Norfolk
WASHINGTON—College Station, Pullman; Western Wash. Station; Puyallup
WEST VIRGINIA—Morgantown
WISCONSIN—Madison
WYOMING—Laramie

MANUFACTURING

Most Important American Manufactures

The leading industry of the United States is manufacturing. The most important manufactures in 1939 were those connected with *motor vehicles* and their bodies and parts. The number of establishments devoted to this

branch of industry was 1,054. The average number of wage earners employed in these establishments was 397,537. The cost of material, etc., used in the manufacture of vehicles and equipment was \$2,720,561,158. The value of the finished vehicles was \$4,039,930,733. In all four of the categories indicated—that is, in magnitude

of establishments, average number of workers employed, cost of material, and value of finished products—the motor vehicle industry ranked first.

The second most important of our national industries was connected with *steel works and rolling mills*. Two hundred and fifty-three establishments were engaged in steel manufacturing in 1939. The average number of workers employed in these establishments was 368,904. While the steel industry ranked 2nd among American industries in magnitude of working plants, in average number of wage earners employed, and in value of products (\$2,720,019,564), it ranked 4th in cost of material used (\$1,572,471,554).

Third on the list of American manufactures were *cotton broad woven goods*. In 1939, there were 661 establishments in this industry and an average of 312,249 wage earners employed. While ranking 3rd in magnitude of establishments and average number of workers, the manufacture of cotton broad woven goods dropped to 10th place in value of products (\$868,354,285) and to 11th place in cost of material (\$431,023,433).

Ranking 4th in magnitude of establishments and average number of wage earners, 13th in value of products, and 23rd in cost of material in 1939 were the *sawmills and veneer mills*. In this industry 7,391 establishments and an average of 265,185 employees were functioning. Cost of material, \$280,009,254. Value of products, \$692,944,624.

Footwear (excluding rubber) came next in 1939, with 1,070 establishments, an average of 218,028 wage earners, \$388,439,102 cost of material, and \$734,673,111 value of products. The footwear industry ranked 12th in value of products and 14th in cost of material.

Sixth in magnitude of establishments and average number of wage earners, 5th in value of products, and 7th in

cost of material was the branch of the *food industry* that includes bread and other bakery products. (Biscuit, crackers, and pretzels were not included in this category.) The numerical totals here were: 18,049 establishments; average of 201,537 wage earners; \$567,443,736 cost of material; and \$1,211,395,278 value of products.

Woolen and worsted manufactures came 7th on the list. Ranking 12th in cost of material (\$422,349,478), 14th in value of products (\$685,311,713), the woolen and worsted industry occupied 583 establishments and employed an average of 140,022 wage earners.

Wholesale meat packing was the 8th most important American manufacture. This industry ranked 2nd in cash paid for material, etc. (\$2,226,539,039) and 3rd in value of products (\$2,648,325,552). Number of establishments, 1,478. Average number of wage earners, 119,853.

Paper and paperboard mills came next on the list, ranking 9th in magnitude of establishments and average number of wage earners and 8th in cost of material (\$532,260,521) as well as in value of products (\$933,015,664). Number of establishments, 638. Average number of wage earners, 110,575.

Canned and dried fruits and vegetables were the 10th most important manufacture. In cost of material and value of products this industry ranked 16th. The figures were: Number of establishments, 2,007; average number of wage earners, 98,002; cost of material, \$356,280,508; value of products, \$587,343,024.

Petroleum refining, so closely linked with the motor vehicle industry, ranked 16th in magnitude of establishments and average number of wage earners, but was 3rd in cost of material and 4th in value of products. The figures for this industry were: Number of establishments, 485; average num-

ber of wage earners, 72,840; cost of material, etc., \$1,933,264,243; value of products, \$2,461,126,549.

Shipbuilding and repairing, so intimately bound up with war production, ranked 19th in magnitude of establishments and average number of wage earners, and was 44th in cost of material and 37th in value of products. The figures for this industry were: Number of establishments, 406; average number of wage earners, 66,611; cost of material, etc., \$153,415,481; and value of products, \$327,387,099.

Electrical appliances, which became increasingly important after 1900, ranked 94th in magnitude of establishments and average number of wage earners, 86th in value of products (\$145,696,194), and 108th in cost of material (\$58,081,360). There were 138 establishments engaged in making electrical appliances and 19,890 wage earners employed in these establishments.

The total number of establishments in the 177 chief American manufacturing industries in 1939 was 184,230. The average aggregate of wage earners employed in these establishments was 7,886,567. The total cost of material, etc., was \$32,160,106,681. The total value of products was \$56,843,024,800.

Chief Manufacturing States

New York leads all the states of the Union in magnitude of manufacturing establishments, number of wage earners employed, amount of wages paid, cost of materials used, and value of products. The figures in 1939 were: 34,514 establishments; 957,853 wage earners; \$1,163,806,520 wages paid; \$3,783,904,735 cost of materials; \$7,134,400,147 value of products.

Pennsylvania, which came 2nd on the list compiled by the U.S. Bureau of the Census, had less than half as many manufacturing establishments as those in New York State. The figure was 13,802. Employees numbered

858,307. Wages paid amounted to \$1,003,347,730. Cost of materials, \$2,980,948,116. Value of products, \$5,473,317,408.

Illinois and California, which came next, each had between 12,000 and 13,000 working establishments. The figures were: Illinois, 12,980; California, 12,329. In the other categories Illinois almost doubled the figures of California. Wage earners in Illinois in 1939 were 596,560; in California, 275,477. Wages paid in Illinois were \$750,239,085; in California, \$365,110,474. Cost of materials in Illinois was \$2,593,215,612; in California, \$1,654,318,758. Value of products in Illinois was \$4,795,201,154; in California, \$2,796,221,903.

Ohio was 5th among manufacturing states, with 10,070 establishments, 598,392 wage earners, \$812,676,444 wages paid, \$2,459,191,656 cost of materials, and \$4,584,606,792 value of products.

Michigan, with its immense motor vehicle industry, had 6,313 establishments and employed 523,071 wage earners. Wages paid in 1939 amounted to \$790,740,567. Cost of materials, \$2,550,346,742. Value of products, \$4,341,413,139.

Value of American Manufactures

The United States is the foremost manufacturing country of the world. The total value of products manufactured in 1939 was \$56,843,024,800.

The total value of American manufactures multiplied almost exactly 70 times during the 80 years from 1849 to 1929. In the depression which began late in 1929, the values of manufactured products fell sharply. By 1933 these values had dropped from \$70,000,000,000 in 1929 to \$30,557,328,000. In 1935, however, values advanced, and in 1937 they reached \$60,713,000,000.

Wages paid to workers in manufacturing industries followed a similar

pattern. They declined to \$5,262,000,000 in 1933 from \$11,607,000,000 in 1929, and were \$10,113,000,000 in 1937. Wages paid in 1939 amounted to \$9,089,940,916.

Production of Electric Energy

The total U.S. production of electric energy in 1943 was 220,776,000,000 kilowatt-hours. Nearly two-thirds of this energy was generated by steam plants; slightly more than one-third was generated by hydro-electric (water-power) plants. The fuel consumed was: Coal, 79,665,000 short tons; oil, 18,085,000 barrels; gas, 301,090,000,000 cubic feet.

In 1943 private utility companies owned about 38,000,000 kilowatts of the total U.S. central station capacity of 48,000,000 kilowatts. To this privately owned total, electric railways and isolated mining and manufacturing plants added another million kilowatts. In 1945 private utility output was some 400% greater than in 1917.

One of the largest U.S. centers of privately owned power is the Niagara Falls region. Here power is generated by hydro-electric plants. So far, about 1,000,000 kilowatts have been developed, 416,000 on the American side of the Falls and 621,000 (part of which is supplied to the American power system) on the Canadian side. In addition the Falls are interconnected with a 550,000 kilowatt steam plant in Buffalo.

Nine million kilowatts of capacity were classed by the Federal Power Commission in 1943 as "public" in ownership. Of this total nearly 5,000,000 were in federal government power districts and authorities, over 3,000,000 in municipal utilities, and less than 1,000,000 in non-central stations (largely for municipal uses).

Stupendous government installations are those connected with the Boulder Dam and the Bonneville and Grand Coulee dams. In 1944 the Boulder

power plant had an installed capacity of 952,300 kilowatts. The present installed capacity of Bonneville Dam is 518,400 kilowatts. The ultimate capacity of Grand Coulee Dam is to be 1,974,000 kilowatts. In addition to Boulder, Bonneville, and Grand Coulee dams, the Department of the Interior between 1933 and 1942 completed 41 other power dams. The Tennessee Valley Authority's power-generating system has an installed capacity of 1,636,000 kilowatts.

Through the Rural Electrification Administration the Department facilitates the introduction of electric service in rural areas. In 1935, when this Administration was created, less than 11% of U.S. farms were served by electricity. In 1943 the percentage was more than 37.

Pig Iron and Steel Output

The production of pig iron in the United States in 1943 was 60,810,670 net tons, an increase of more than 40 million over our 1938 production.

The production of steel in the same year was 88,836,512 net tons, an increase of more than 50 million over our 1938 production.

Pennsylvania led all the states of the Union in the production of steel; it yielded 27,695,292 net tons. Ohio came next with 18,921,717 net tons, and Indiana came 3rd with 11,093,420 net tons.

Production of Lumber in the United States

The United States is the world's largest producer of lumber and furnishes over half the world's supply. More than 36 billion board feet were cut in 1942. The states leading in the production of lumber in that year were Oregon (6,480,178,000 board measure), Washington (4,976,170,000), California and Nevada (2,330,041), and Alabama (2,109,744).

Book Publishing

It is estimated that 6,970 new books were published in the United States in 1944. Of this number, 608 were juvenile books; 905, fiction; and 5,457, non-fiction.

In 1943, 551,290,000 books of all types were purchased in the United States.

Dehydrated Foods

More than 150 dehydrating plants are in operation in the United States and have sent during recent years im-

mense quantities of foodstuffs to Europe in one-sixth of the shipping space ordinarily required.

Dehydrated meat production, which was practically non-existent in 1940, rose to about 110,000,000 lbs. three years later.

Dried egg production was nearly 30 times as large in 1942 as it was in 1940. The 1942 figure was 235,000,000 lbs.

Dried milk production rose from 322,000,000 lbs. in 1940 to 565,000,000 lbs. in 1942.

COMMERCIAL AND INDUSTRIAL FAILURES IN THE UNITED STATES

Year	Failures	Current Liab. (In thousands of dollars)	Year	Failures	Current Liab. (In thousands of dollars)	Year	Failures	Current Liab. (In thousands of dollars)
1943.....	3,221	45,339	1935.....	12,244	310,580	1925.....	13,197	443,744
1942.....	9,405	100,763	1934.....	12,091	333,959	1920.....	21,214	295,121
1941.....	11,848	136,104	1933.....	20,307	502,830	1915.....	8,881	302,286
1940.....	13,619	166,684	1932.....	31,822	928,313	1910.....	22,156	201,757
1939.....	14,768	182,520	1931.....	28,285	736,310	1905.....	12,652	102,676
1938.....	12,836	246,505	1930.....	26,355	668,282	1900.....	11,520	138,496
1937.....	9,490	183,253	1929.....	22,909	483,252	1895.....	10,774	173,186
1936.....	9,607	203,173						

MINING

Mineral Production in the United States

The United States is the foremost mineral-producing country in the world, and yields each year more than one-third of the total value of all mineral products.

Aluminum, the lightest metal in common use, is found mainly in New York, Tennessee, North Carolina, and Washington.

Copper, which is, next to iron, the most important metal in use, is found mainly in Arizona, Utah, Montana, and Nevada.

Gold, the standard precious metal, is found mainly in California, Alaska, South Dakota, and Nevada.

Iron, the most useful of all metals, is found mainly in Minnesota, Michigan, Alabama, and Pennsylvania.

Lead, the softest, heaviest, most malleable, and most easily melted of the common metals, is found mainly in Missouri, Idaho, Utah, and Montana.

Mercury (or quicksilver), a heavy metal which is liquid at ordinary temperatures, is found mainly in California, Oregon, Nevada, and Arkansas.

Platinum metals, which are rare, are found mainly in Alabama, California, Oregon, and Montana.

Silver, the common precious metal, is found mainly in Idaho, Montana, Utah, and Colorado.

Tin, which is less abundant than

most of the common metals, is found mainly in Alabama, South Dakota, New Mexico, and Montana.

Zinc, one of the most useful metals, is found mainly in Oklahoma, New Jersey, Idaho, and Kansas.

Value of Mineral Products

The total value of mineral products in the United States in 1942 was \$7,569,500,000. This is the largest total reported up to that date. Of this sum, \$2,361,800,000 represented metallic minerals; \$1,123,100,000, the production of non-metallic minerals; and \$4,084,600,000, the value of mineral fuels. Coal, petroleum, and pig iron are the three most valuable products taken from the earth in the United States during recent years.

The peak in mineral production prior to 1942 was reached in 1920, when the value was \$6,981,340,000. The next highest figure was in 1926, when the value was \$6,213,600,000.

Chief Mineral-Producing States

Texas in 1941 produced a group of minerals (mainly petroleum, natural gas, sulphur, natural gasoline) that exceeded in value the mineral products of any other state in the Union. This group represented 15.46% of the total value of minerals produced in the United States in the year given.

Pennsylvania ranked second in the value of its contribution to the mineral wealth of the nation. The percentage of the whole was 13.13, and the minerals produced were mainly coal, cement, natural gas, and petroleum.

California came third, bringing gold to our mineral wealth, as well as cement, petroleum, and natural gas. This group represented 9.03% of the whole.

West Virginia was fourth, with a percentage of 7.58 of the whole and a contribution mainly of stone, coal, natural gas, and petroleum.

Petroleum Production

The United States produces more than two-thirds of the world's petroleum. In 1943 it broke all records with a total of 1,503,176,000 42-gallon barrels of crude petroleum valued at \$1,812,560,000 at the wells. Petroleum motor fuel production during the same year was 610,533,000 barrels.

Texas was the state which produced the largest amount of crude petroleum in 1943. The figure was 593,520,000 barrels. California came next with 284,235,000 barrels. Louisiana and Oklahoma each produced something over 123,000,000 barrels.

Outside of the United States the country which produces annually the largest amount of crude petroleum is Russia. In 1943 Russia produced more than 200 million barrels. In the same year Venezuela produced more than 177 million barrels. The production figure for Iran was more than 73 million, for Rumania more than 36 million. The total world production of crude petroleum in 1943 was more than 2,222 million barrels.

Coal and Coke Production

Anthracite (hard coal) in the United States comes almost entirely from eastern Pennsylvania. In 1942 the net tonnage was 60,327,729 valued at \$271,673,000.

Bituminous, or soft, coal in the United States comes mainly from West Virginia, Pennsylvania, Illinois, and Kentucky. The net tonnage in 1942 was 588,692,000; its value, \$1,373,991,000.

Coke production in 1943 was 71,676,063 net tons valued at \$476,117,000.

Iron Ore Production

Minnesota in 1943 produced more than four times as much iron ore as was produced in any other state. The figure was 69,173,000 net tons. Michi-

gan came next with 15,620,000 tons, and Alabama third with 8,133,000 tons. The production for the entire nation was 101,386,000 gross tons.

Copper, Zinc, and Lead Production

Copper in the United States comes mainly from Arizona, Utah, Montana, and Michigan. In 1943, 2,186 million pounds, valued at \$257,934,000, were mined. This production constitutes about half of the world's annual supply.

Zinc in the United States comes mainly from Oklahoma, New Jersey, Kansas, and Indiana. In 1943, 594,250 short tons, valued at \$98,000,000, were mined. This tonnage constitutes about half of the world's annual supply.

Lead in the United States comes mainly from Missouri, Idaho, Utah, and Oklahoma. In 1943, 449,841 short tons, valued at \$60,349,000, were mined. This tonnage constitutes about one quarter of the world's annual supply.

Salt Production

More than 14 million short tons of salt were produced in the United States in 1943.

According to the U.S. Bureau of

Mines Yearbook of 1941, more salt is used in the manufacture of chemicals than any other material.

The average American uses about 6 lbs. of table salt annually.

Michigan produces more salt than does any other state. New York State ranks second. Salt is found in 19 states, and produced in commercial quantities in 13.

Silver Production

The money value of silver mined in the United States in 1940 was slightly more than half the money value of silver mined throughout the world. The figures were: 69,585,734 fine ounces valued at \$49,483,000, for the United States; 272,510,428 fine ounces valued at \$95,610,000, for the world.

Production of silver by countries in 1942 was: Canada, 20,695,101 fine ounces valued at \$7,997,622; Mexico, 84,864,359 valued at \$32,795,832; South America, 26,472,556 valued at \$10,334,661; Philippines, 231,197 valued at \$89,346; Australia, 10,000,000 valued at \$3,864,500.

A silver vault has been completed by the U.S. Government at West Point, on the Hudson, and silver from New York was moved there in 1938 and 1940.

TRANSPORTATION AND COMMUNICATION

American Railroads

In 1942 the number of passenger-miles traveled on U.S. trains was a record up to that year. The figure was 53,747,029,000.

There are 132 major steam railroads in the United States. The number of miles operated in 1942 was 231,861, to which should be added 156,341 miles of second and other main track rails (cross-overs, switching, etc.). The average number of employees was 1,271,077. The number of passengers carried in 1942 was 399,245,822.

The number of miles operated on electric railways in 1942 was 18,200. The number of passengers carried was 9,768,000,000.

American Aviation

Air transport in the United States began when the Army started to carry mail in the spring of 1918. The service was taken over later in the year by the Post Office Department.

Commercial air transport began three years later, with planes flying regularly from coast to coast. The

DISTANCES BETWEEN CITIES

(By Automobile Routes)

EASTERN CITIES

(Table continued on facing page.)

Cities	Albany, N. Y.	Atlantic City	Baltimore, Md.	Boston, Mass.	Buffalo, N. Y.	Burlington, Vt.	Charleston, W. Va.	Chicago, Ill.	Cincinnati, Ohio	Cleveland, Ohio	Columbus, Ohio	Detroit, Mich.	Evansville, Ind.	Gettysburg, Pa.	Hagerstown, Md.	Harrisburg, Pa.
Albany, N. Y.																
Atlantic City, N. J.	272															
Baltimore, Md.	339	135														
Boston, Mass.	184	345	412													
Buffalo, N. Y.	280	431	375	464												
Burlington, Vt.	154	426	493	259	386											
Charleston, W. Va.	703	555	420	832	458	844										
Chicago, Ill.	806	819	697	990	526	912	494									
Cincinnati, Ohio	716	640	505	880	435	821	200	294								
Cleveland, Ohio	467	489	363	651	187	573	271	354	248							
Columbus, Ohio	607	532	397	772	327	713	179	315	108	140						
Detroit, Mich.	534	658	532	718	254	640	367	272	254	169	188					
Evansville, Ind.	947	874	749	1114	667	1053	393	297	234	480	342	452				
Gettysburg, Pa.	314	180	54	416	321	468	382	639	459	309	347	478	705			
Hagerstown, Md.	351	210	75	452	306	504	346	700	429	301	320	470	662	36		
Harrisburg, Pa.	278	160	74	394	301	432	418	689	487	335	382	504	724	36	72	
Indianapolis, Ind.	775	707	572	947	495	881	308	186	108	308	175	280	172	522	495	557
Lake George, N. Y.	62	334	401	219	328	94	765	869	778	529	669	596	1009	376	413	340
Louisville, Ky.	825	749	614	989	544	930	268	300	109	357	217	363	125	568	538	596
Montreal, Que.	234	506	573	353	387	93	845	865	822	574	714	593	1045	545	585	509
New York, N. Y.	147	124	191	221	377	301	597	831	660	508	555	631	897	211	236	173
Norfolk, Va.	465	273	228	618	606	721	405	889	605	659	584	728	798	269	261	305
Philadelphia, Pa.	241	62	98	314	369	394	518	757	586	427	481	596	823	118	144	103
Pittsburgh, Pa.	476	357	235	590	222	628	228	462	291	132	186	301	528	177	162	198
Portland, Me.	242	452	519	107	522	203	939	1047	957	708	848	775	1188	523	559	501
Quebec, Que.	399	671	738	387	552	258	1010	1030	987	739	879	758	1210	710	750	674
Richmond, Va.	484	280	145	557	523	638	318	802	518	474	497	643	711	186	178	222
St. Louis, Mo.	1021	953	818	1193	741	1127	533	294	343	554	421	626	172	768	741	803
Toledo, Ohio	579	601	475	763	299	685	310	242	197	112	131	57	395	421	413	447
Toronto, Ont.	383	570	484	573	109	479	567	511	493	296	436	239	691	430	415	410
Washington, D. C.	376	172	37	449	376	530	383	698	497	368	395	537	737	78	70	114
White Mts., N. H.	220	451	518	167	493	107	921	1019	928	680	820	747	1160	532	569	496

number of passengers carried grew from thousands to millions. On March 26, 1940, U.S. airlines completed their first full year of travel, totaling 805 million passenger-miles, without a single passenger fatality.

Following the Japanese attack on Pearl Harbor, the Army took over almost half of the 434 planes operated commercially within and beyond continental United States, and used them to carry material and personnel at home and abroad.

Pan-American Airways was founded in 1928 and by 1938 had crisscrossed the Caribbean, circled South America, and reached across the Pacific and the Atlantic. In 1938 it carried 225,000 passengers. During recent years its

Clipper planes have made more than 500 crossings of the Pacific and more than 2,000 of the Atlantic.

Automobiles

The total number of automobiles produced in the United States in 1941 was estimated at 4,838,561. Of these, 3,744,300 were passenger cars and 1,094,261 were motor trucks.

Registrations of automobiles in the United States in the same year were 32,557,954. The world registration of automobiles in 1941 was 45,376,891.

Growth of Radio

Sixty million radio sets were in use in the United States in 1944, com-

OF THE UNITED STATE

(By Automobile Routes)

EASTERN CITIES

(Table continued on facing page.)

BVCL

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Indianapolis	Lake George	Louisville, Ky.	Montreal, Que.	New York, N. Y.	Norfolk, Va.	Philadelphia, Pa.	Pittsburgh	Portland, Me.	Quebec, Que.	Richmond, Va.	St. Louis, Mo.	Toledo, Ohio	Toronto, Ont.	Washington	White Mts.	Cities
775	62	825	234	147	465	241	476	242	399	484	1021	670	383	376	220	Albany, N. Y.
707	334	749	506	124	273	62	357	452	671	280	953	601	570	172	451	Atlantic City, N. J.
572	401	014	573	101	228	98	235	510	738	145	818	475	484	37	518	Baltimore, Md.
047	219	039	353	221	618	314	590	107	387	557	1193	763	573	449	167	Boston, Mass.
495	328	544	387	377	686	369	222	622	552	523	741	299	109	378	493	Buffalo, N. Y.
881	94	930	93	301	721	394	628	203	258	638	1127	685	479	530	107	Burlington, Vt.
308	765	268	845	507	405	518	228	039	1010	318	533	310	567	383	021	Charleston, W. Va.
186	868	300	865	831	889	757	462	1047	1030	802	294	242	511	698	1019	Chicago, Ill.
108	778	169	522	660	605	589	291	957	987	518	343	197	493	497	928	Cincinnati, Ohio
308	529	357	574	508	559	427	132	708	739	474	554	112	296	368	580	Cleveland, Ohio
175	609	217	714	585	564	481	186	848	879	497	421	131	436	395	820	Columbus, Ohio
280	596	363	593	631	728	596	301	778	758	643	526	57	239	537	747	Detroit, Mich.
172	1009	125	1045	897	708	823	528	1188	1210	711	172	395	691	737	1160	Evansville, Ind.
422	376	568	545	211	269	118	177	523	710	185	768	431	430	78	532	Gettysburg, Pa.
595	413	638	685	236	261	144	162	559	750	178	741	413	415	70	569	Hagerstown, Md.
557	340	590	509	173	308	103	100	501	674	222	803	447	410	114	496	Harrisburg, Pa.
837	837	114	873	730	713	656	361	1016	1038	628	246	223	519	510	993	Indianapolis, Ind.
114	887	887	774	209	540	303	530	265	339	546	1083	641	440	438	201	Lake George, N. Y.
874	874	956	956	769	673	695	403	1096	1121	586	265	306	602	606	1043	Louisville, Ky.
730	209	769	381	329	93	369	328	546	336	976	620	486	228	327		Montreal, Que.
713	540	673	699	329	237	427	725	864	87	938	671	715	191	656		New York, N. Y.
656	303	695	475	03	237	295	421	640	243	902	539	478	135	430		Norfolk, Va.
361	538	403	609	369	427	295	697	774	344	607	244	331	236	594		Philadelphia, Pa.
1016	265	1096	282	328	725	421	697	280	280	664	1262	820	624	556	96	Pittsburgh, Pa.
1038	339	1121	165	546	864	640	774	280	883	1248	815	510	775	242		Portland, Me.
626	546	580	718	336	87	243	344	664	883	651	586	632	108	663		Quebec, Que.
746	1083	265	1119	076	938	002	607	1262	1248	651	469	765	816	1239		Richmond, Va.
223	641	306	650	620	671	539	244	820	815	586	469	296	480	792		St. Louis, Mo.
610	440	602	354	406	715	478	331	624	519	632	765	296	488	585		Toledo, Ohio
570	438	606	610	228	191	135	236	556	778	108	816	460	488	563		Toronto, Ont.
893	201	1043	186	327	686	430	694	96	242	663	1239	792	586	563		Washington, D. C.
																White Mts., N. H.

pared with about 140,000 sets in 1922. This means that nearly every family had two sets. The number of persons who listen regularly at the present time is estimated as 90 million.

Radio stations are licensed by the Federal Communications Commission, which allocates wave lengths, assigns frequencies, and determines broadcasting hours.

In December, 1942, there were 919 licensed radio stations. Of these about 300 were owned and operated by newspapers. The other commercial stations were owned by business groups, individuals, or national or regional networks. About 50 stations were non-commercial and were maintained by colleges and university groups, city

school systems, municipalities, or chambers of commerce.

Most of these stations broadcast 14 or more hours daily, some of them 24 hours daily.

Motion Pictures

Seventy per cent of the world's films are made in Hollywood, California. In 1942, 533 feature-length films and 683 short films were produced there, most of them by the 8 major producing companies.

Some 200,000 persons are employed in the motion-picture industry: 30,000 in production, 14,000 in distribution, and the remainder in theaters throughout the country.

There are more than 20,000 motion-

DISTANCES BETWEEN CITIES

(By Automobile Routes)

WESTERN CITIES

(Table continued on facing page.)

Cities	Bismarck, N. D.	Boise, Idaho	Calgary, Alta.	Cheyenne, Wyo.	Chicago, Ill.	Dallas, Texas	Denver, Colo.	Duluth, Minn.	El Paso, Texas	Gd. Canyon, Ariz.	Helena, Mont.	Houston, Texas	Kansas City, Mo.	Los Angeles, Cal.	Memphis, Tenn.	Mexico City
Bismarck, N. D.	1053	886	723	884	1333	827	454	1510	1699	668	1579	863	1849	1387	2534	
Boise, Idaho	1053	914	797	1784	1686	860	1507	1407	771	582	1932	1505	1086	2080	2784	
Calgary, Alta.	886	914	1080	1800	2001	1184	1270	1927	1312	422	2247	1750	1657	2274	3106	
Cheyenne, Wyo.	723	797	1080	994	921	104	1028	847	866	681	1167	692	1211	1190	2026	
Chicago, Ill.	884	1784	1800	994	968	1052	495	1522	1813	1596	1107	517	2219	542	2168	
Dallas, Texas	1333	1686	2001	921	968	817	1182	632	1104	1619	246	540	1446	478	1200	
Denver, Colo.	827	860	1184	104	1052	817	1086	743	872	785	1063	645	1268	1164	1789	
Duluth, Minn.	454	1507	1270	1028	495	1182	1086	1814	1831	1122	1428	642	2176	999	2382	
El Paso, Texas	1510	1407	1927	847	1522	632	743	1814	636	1526	757	1094	814	1110	1377	
Grand Canyon, Ariz.	1699	771	1312	860	1813	1104	872	1831	636	890	1350	1336	526	1459	2013	
Helena, Mont.	668	582	422	681	1596	1619	785	1122	1526	890	1865	1331	1235	1935	2707	
Houston, Texas	1579	1932	2247	1167	1107	246	1063	1428	757	1350	1865	786	1571	588	1130	
Kansas City, Mo.	863	1505	1750	692	517	540	645	642	1094	1336	1331	786	1742	478	1740	
Los Angeles, Calif.	1849	1086	1657	1211	2219	1446	1268	2176	814	526	1235	1571	1742	1865	2191	
Memphis, Tenn.	1387	2080	2274	1190	542	478	1164	999	1110	1459	1935	588	478	1865	1657	
Mexico City, Mexico	2534	2784	3106	2026	2168	1200	1789	2382	1377	2013	2707	1130	1740	2191	1657	
Milwaukee, Wis.	795	1793	1685	1003	89	1057	1061	467	1611	1869	1505	1196	563	2214	631	2257
Minneapolis, Minn.	449	1532	1339	874	435	1028	932	154	1569	1677	1159	1274	488	2210	886	2228
New Orleans, La.	1820	2237	2505	1425	598	504	1321	1405	1124	1608	2123	367	892	1938	406	1497
Omaha, Neb.	658	1297	1545	507	487	705	556	521	1202	1373	1146	951	205	1718	683	1905
Portland, Ore.	1382	478	859	1275	2262	2164	1338	1836	1885	1249	714	2410	1983	1026	2558	3262
Reno, Nev.	1502	606	1390	1007	2001	1885	1064	1972	1294	659	912	2008	1709	480	2228	2671
Salt Lake City, Utah ..	970	380	921	475	1469	1353	532	1440	1027	391	499	1595	1177	736	1696	2321
St. Louis, Mo.	1129	1758	2016	945	294	674	898	692	1228	1589	1677	813	253	1925	307	1882
San Antonio, Texas	1608	1884	2181	1101	1243	275	864	1457	586	1202	1782	205	815	1380	732	925
San Francisco, Calif.	1736	840	1571	1241	2235	1850	1298	2206	1252	897	1146	2009	1943	404	2182	2629
Santa Fe, N. M.	1237	1322	1594	514	1369	661	410	1494	333	484	1195	907	856	890	1043	1710
Seattle, Wash.	1302	547	779	1307	2232	2280	1407	1756	1954	1318	634	2479	1957	1217	2627	3331
Spokane, Wash.	993	444	470	998	1923	1939	1102	1447	1851	1215	325	2190	1648	1415	2260	3032
Vancouver, B. C.	1418	690	791	1423	2348	2384	1527	1872	2097	1461	710	2615	2073	1360	2685	3457
Winnipeg, Man.	448	1751	917	1128	934	1410	1252	430	1907	1809	1116	1656	910	2154	1385	2610
Yellowstone Nat'l Pk.	613	440	575	498	1461	1419	602	1067	1345	748	183	1665	1148	1093	1708	2524

picture theaters in the United States. Of these, 17,728 were operating in January, 1943, with a seating capacity large enough to accommodate one-twelfth of the nation's population at one time. The principal cities have theaters seating up to several thousand persons; Radio City Music Hall, in New York City, seats 6,200. Some 90 million persons, paying an average admission price of 25 cents, made weekly visits to motion-picture theaters in 1942.

There are many small companies engaged in the production of non-theatrical films for showing in schools, churches, meetings, etc. During the Second World War all branches of the armed forces made effective use of

the non-theatrical film for purposes of education, training in special skills, and in orientation work.

Telephones

The United States leads all the nations of the world in the number and quality of its telephones.

There are about 33 million telephones in the world, more than half of them in the United States.

New York City has 1,889,181 telephones, 27.2 per hundred persons.

Chicago has 1,151,704 telephones, 34.2 per hundred of the population.

Los Angeles comes 3rd with 559,264 telephones, 32.9 per hundred of the population.

Washington is next with 364,204

OF THE UNITED STATES

(By Automobile Routes)

WESTERN CITIES

(Table continued on facing page.)

Milwaukee, Wis.	Minneapolis	New Orleans, La.	Omaha, Neb.	Portland, Ore.	Reno, Nev.	Salt Lake City, Utah	St. Louis, Mo.	San Antonio, Tex.	San Francisco	Santa Fe, N. M.	Seattle, Wash.	Spokane, Wash.	Vancouver, B. C.	Winnipeg, Man.	Yellowstone National Park	Cities
795	449	1829	658	1382	1502	970	1129	1608	1736	1237	1302	993	1418	448	613	Bismarck, N. D.
1793	1532	2237	1297	478	606	380	1758	1884	840	1322	547	444	690	1751	440	Boise, Idaho
1685	1339	2505	1545	859	1290	921	2016	2181	1571	1594	779	470	791	917	575	Calgary, Alta.
1003	874	1425	507	1275	1007	475	945	1101	1241	514	1307	998	1423	1128	498	Cheyenne, Wyo.
89	435	998	487	2262	2001	1469	294	1243	2235	1369	2232	1923	2348	934	1461	Chicago, Ill.
1057	1028	504	705	2164	1885	1353	674	275	1850	661	2280	1939	2364	1410	1419	Dallas, Texas
1061	932	1321	556	1338	1064	532	898	864	1298	410	1407	1102	1527	1252	602	Denver, Colo.
467	154	1405	521	1836	1972	1440	692	1457	2206	1494	1756	1447	1872	430	1067	Duluth, Minn.
1611	1569	1124	1202	1885	1294	1027	1228	566	1252							El Paso, Texas
1669	1677	1608	1373	1249	659	391	1589	1202	897							Grand Canyon, Ariz.
1505	1159	2123	1146	714	912	499	1677	1782	1146	1						Helena, Mont.
1196	1274	367	951	2410	2009	1595	813	205	2009	907	2479	2190	2815	1656	1665	Houston, Texas
563	488	892	205	1983	1709	1177	253	815	1943	856	1957	1648	2073	910	1148	Kansas City, Mo.
2214	2210	1938	1718	1026	480	736	1925	1380	404	890	1217	1415	1360	2154	1093	Los Angeles, Calif.
631	886	406	683	2558	2228	1696	307	732	2182	1043	2627	2260	2685	1385	1708	Memphis, Tenn.
2257	2228	1497	1905	3262	2671	2321	1882	925	2629	1710	3331	3032	3457	2610	2524	Mexico City, Mex.
346	1087	496	2219	2010	1478	383	1332	2244	1419	2139	1830	2255	845	1416		Milwaukee, Wis.
1087	1340	1340	367	1873	1818	1286	579	1303	2050	1342	1793	1484	1909	499	1092	Minneapolis, Minn.
496	367	1097	1097	2668	2389	1857	713	572	2342	1165	2784	2443	2668	1802	1923	New Orleans, La.
				1775	1514	982	458	980	1748	966	1780	1471	1896	705	963	Omaha, Neb.
2219	1873	2668	1775		779	858	2236	2362	712	1800	191	389	334	1820	918	Portland, Ore.
2010	1818	2389	1514	779		532	1962	1928	234	1104	970	1050	1113	1966	770	Reno, Nev.
1478	1286	1857	982	858	532		1430	1396	766	875	927	824	1070	1418	357	Salt Lake City, Utah
383	579	713	458	2236	1962	1430		949	2196	1109	2311	2002	2427	1078	1401	St. Louis, Mo.
1332	1303	572	980	2362	1928	1396	949		1784	841	2427	2328	2570	1685	1466	San Antonio, Texas
2244	2050	2342	1748	712	234	766	2196	1784		1207	903	1101	1046	2200	1004	San Francisco, Calif.
1419	1342	1165	968	1800	1104	875	1109	841	1207		1829	1520	1945	1671	1012	Santa Fe, N. M.
2139	1793	2784	1780	191	970	927	2311	2427	903	1829		309	143	1740	817	Seattle, Wash.
1830	1484	2443	1471	389	1050	824	2002	2328	1101	1520	309		425	1431	508	Spokane, Wash.
2255	1909	2868	1896	334	1113	1070	2427	2570	1046	1945	143	425		1747	933	Vancouver, B. C.
845	499	1802	705	1820	1966	1418	1078	1685	2200	1671	1740	1431	1747		1061	Winnipeg, Man.
1416	1092	1923	963	918	770	357	1401	1466	1004	1012	817	508	933	1061		Yellowstone Nat. Pk.

telephones, 39.5 per hundred of the population.

London, England, has 1,100,000 telephones, 12.2 per hundred of the population.

Stockholm, Sweden, has 200,733 telephones, 43.5 per hundred of the population.

Berlin in 1939 had 599,911 telephones, 13.8 per hundred of the population.

Tokyo in pre-war years had 290,510 telephones, 4.5 per hundred of the population.

Newspapers

The number of daily newspapers published in the United States in 1943 was 2,026, of which 1,894 were printed

in English. Americans purchase 44 million copies daily—17½ million in the morning and 26½ million in the evening. Every Sunday more than 36 million papers are sold, bringing not only the news of the day but also magazine features, literary supplements, and colored comic sections.

There were 56 chain newspaper groups in the United States in 1943. The oldest of these, controlled by William Randolph Hearst, published in that year 17 dailies. Another group, the Scripps-Howard chain founded by the late Edward Wyllis Scripps, published 19 dailies. A third group, controlled by Frank E. Gannett, published 19 dailies.

The Associated Press, founded in

1848, is a cooperative organization with approximately 1,400 member newspapers, 94 bureaus in the United States, and a worldwide newsgathering service.

The United Press, an outgrowth of the Scripps chain of newspapers and founded in 1907, serves 871 newspapers.

The International News Service, founded by Hearst in 1909, serves 700 papers.

Some 350 newspaper syndicates make the services and talents of famous writers and artists available to newspapers which could not individually afford to purchase them. The pioneer in this field was the McClure syndicate,

organized in 1884 by Samuel S. McClure and featuring the writings of Mark Twain, Rudyard Kipling, and Conan Doyle, among others.

Periodicals

Monthly and weekly periodicals to the number of 6,354 were published in the United States in 1943. Twenty general magazines have a circulation of more than a million each and a total circulation of 45 million. One hundred and fifty pulp-paper magazines, mostly fiction, have a circulation of 10 million. More than 10,000 weekly and rural papers are published. Some of the former are organs of labor unions, fraternal and religious organizations.

SOCIAL FACTS AND FIGURES

POPULATION AND HEALTH

Population of the United States

The estimated population of the United States and of all its territories and possessions in 1940 was 150,621,231. The figure for the United States and its territories and possessions, excluding the Philippine Islands, was 134,265,231. The figure for continental United States was 131,669,275.

The distribution of urban and rural population at the time of the 1940 census was estimated as follows: 74,423,702 living in cities with a population of more than 2,500; 30,216,188 farm population; 27,029,385 rural non-farm (small town) population.

According to the 1940 census, there were 59,448,548 white males, 58,766,322 white females, 6,613,044 non-white males, and 6,841,361 non-white females in the United States.

The estimated population of continental U.S. on July 1, 1943, was 136,485,262.

Center of Population

The center of population in the United States was 2 miles southeast by east of Carlisle, Sullivan County, Indiana, in 1940. In 1790 it had been 23 miles east of Baltimore. These figures represent an uninterrupted progress westward from census to census that was greatest (80.6 miles) during the decade 1850-60 and least (9.8 miles) in the decade 1910-20. The movement southward in the entire period 1790-1940 was only 15.1 miles.

Births and Deaths in the United States

The total number of births in the United States in 1942 was more than twice as large as the total number of deaths in the same year. The figures were: Births, 2,808,996 (1,444,365 males, 1,364,631 females); deaths, 1,385,187 (780,454 males, 604,733

CITIES OF THE UNITED STATES RANKED BY POPULATION

(Based on 1940 Census)

City	Pop. Rank	City	Pop. Rank	City	Pop. Rank
Akron, Ohio	38	Hartford, Conn.	51	Providence, R. I.	37
Albany, N. Y.	65	Houston, Tex.	21	Reading, Pa.	79
Atlanta, Ga.	28	Indianapolis, Ind.	20	Richmond, Va.	45
Baltimore, Md.	7	Jacksonville, Fla.	47	Rochester, N. Y.	23
Birmingham, Ala.	35	Jersey City, N. J.	30	Sacramento, Cal.	85
Boston, Mass.	9	Kansas City, Kan.	69	St. Louis, Mo.	8
Bridgeport, Conn.	59	Kansas City, Mo.	19	St. Paul, Minn.	33
Buffalo, N. Y.	14	Knoxville, Tenn.	77	Salt Lake City, Utah	57
Cambridge, Mass.	78	Long Beach, Cal.	53	San Antonio, Tex.	36
Camden, N. J.	71	Los Angeles, Cal.	5	San Diego, Cal.	43
Canton, Ohio	83	Louisville, Ky.	25	San Francisco, Cal.	12
Charlotte, N. C.	91	Lowell, Mass.	88	Scranton, Pa.	63
Chattanooga, Tenn.	66	Memphis, Tenn.	32	Seattle, Wash.	22
Chicago, Ill.	2	Minneapolis, Minn.	16	Somerville, Mass.	87
Cincinnati, Ohio	17	Miami, Fla.	48	South Bend, Ind.	89
Cleveland, Ohio	6	Milwaukee, Wis.	13	Spokane, Wash.	68
Columbus, Ohio	26	Nashville, Tenn.	50	Springfield, Mass.	58
Dallas, Tex.	31	New Bedford, Mass.	80	Syracuse, N. Y.	41
Dayton, Ohio	40	New Haven, Conn.	54	Tacoma, Wash.	82
Denver, Colo.	24	New Orleans, La.	15	Tampa, Fla.	84
Des Moines, Ia.	55	New York City	1	Toledo, Ohio	34
Detroit, Mich.	4	Newark, N. J.	18	Trenton, N. J.	67
Duluth, Minn.	90	Norfolk, Va.	60	Tulsa, Okla.	62
Elizabeth, N. J.	81	Oakland, Cal.	29	Utica, N. Y.	92
Erie, Pa.	72	Oklahoma City, Okla.	42	Washington, D. C.	11
Fall River, Mass.	73	Omaha, Nebr.	39	Wichita, Kan.	74
Flint, Mich.	56	Paterson, N. J.	64	Wilmington, Del.	75
Fort Wayne, Ind.	70	Peoria, Ill.	86	Worcester, Mass.	44
Fort Worth, Tex.	46	Philadelphia, Pa.	3	Yonkers, N. Y.	61
Gary, Ind.	76	Pittsburgh, Pa.	10	Youngstown, Ohio	49
Grand Rapids, Mich.	52	Portland, Ore.	27		

females). The number of births represented a rate of 21.0 per thousand population. The number of deaths represented a rate of 10.5.

The birth rate in 1942 was highest in New Mexico (26.7), Mississippi (25.4), and North Carolina (25.2), and was lowest in the District of Columbia (17.5), Missouri (18.6), and New York (18.9).

The death rate was highest in Maine (12.6), Vermont (12.4), and Delaware (11.9), and was lowest in Arkansas (8.0), North Dakota (8.2), and North Carolina (8.3).

Average Life Expectancy

The average newborn infant of the white race in the United States may expect today a life span nearly 20 years longer than that of the infant born in 1900. The exact figures, as compiled by the U.S. Bureau of the

Census, are a life expectancy of 62.81 years for boys and of 67.29 years for girls.

Medical Facilities

In January, 1942 there were 180,000 registered physicians in the United States. There were 120,114 graduate nurses in hospitals, and 139,060 other registered nurses.

The hospital facilities of the country as of 1942 are given in the following table:

	Hospitals	Beds
General	4,557	594,260
Nervous and mental	586	645,118
Tuberculosis	468	82,372
Maternity	113	5,903
Industrial	36	2,896
Eye, ear, nose, throat	42	2,546
Children's	43	4,315
Orthopedic	79	7,313
Isolation	52	6,279
Convalescent and rest	139	9,793
Hospital departments of institutions	194	18,532
All other hospitals	36	3,501
	6,345	1,363,827

Size of American Family

The average American family in 1940 consisted of 3.8 persons. This figure represented a decline, as the following figures show: In 1850 there were 5.6 persons in the average family; in 1890 there were 4.9; in 1900, 4.7; in 1910, 4.3; and in 1930, 4.1.

Deaths from Various Causes

The greatest single factor causing death in the United States in 1942 was heart disease, which accounted for 295.2 deaths per 100,000 population. Other diseases with high mortality rates were: cancer, 122.1; nephritis, 72.4; brain injuries, 90.2; pneumonia, 55.7; tuberculosis, 43.1.

Motor Vehicle Accidents and Deaths in the United States

There were 4,400,000 automobile accidents, resulting in a loss of 23,400 lives, in 1943. All but 5,550 of these lives were lost in collisions, and 9,700 of those who died were pedestrians.

U.S. Negro Population

The total Negro population of the United States in 1940 was 12,865,518. Of these about 9 million were living in Southern states. Georgia contained the largest number of Negroes (1,084,927). Mississippi was a close second, with 1,074,578. Alabama, North Carolina, and Texas each contained more than 900,000 Negroes. Of the northern states New York contained the largest number (571,221). Pennsylvania reported a Negro population of 470,172. Ohio contained 339,461 Negroes.

The Negro population of the United States increased 45.6 per cent between 1900 and 1940.

American Indians

The American Indian population was estimated in 1940 as 333,969. Of these, 329,478 were native born and

4,491 were aliens born in the Americas outside the United States.

The 1940 population is probably about half a million less than the aboriginal population of 1492. In 1865 the Indian population was 294,574. By 1930 this figure had risen to 332,397.

The 1930 census showed 41 linguistic stocks divided into 96 tribes.

Indian land holdings in 1940 totaled more than 55½ million acres, of which 18½ million were in Arizona, more than 6 million in Montana, 6 million in New Mexico, 5½ million in South Dakota. There is Indian land in about 30 of the 48 states.

Full-blooded Indians totaled 153,933 (46.3%) in 1930 as against 60.7% in 1910.

Japanese Population under the American Flag

The total number of Japanese in the United States and its possessions (exclusive of the Philippines and military and naval services) in 1940 was 285,448. Of these, 200,631 were citizens and 84,817 aliens. In continental United States the figures were 79,642 citizens; 47,305 aliens; making a total of 126,947.

Marriages and Divorces in the United States

There were 30,191,087 married men and 624,398 divorced men in the United States in 1940, according to Census figures. In the same year there were 30,087,135 married women and 822,563 divorced women.

A rising number of divorces, as compared with marriages, is indicated by the figures covering the number of marriages and divorces during the past half century.

In 1889 there were 530,937 marriages and 31,735 divorces. The proportion of marriages to divorces was something over 16 to 1.

In 1940 there were 1,565,000 mar-

riages and 264,000 divorces. The proportion of marriages to divorces was something less than 6 to 1.

In 1889 the proportion of marriages to population was 9.11 per 1,000; of

divorces to population was .052 per 1,000.

In 1940 the proportion of marriages to population was 11.90 per 1,000; of divorces to population was 2 per 1,000.

EDUCATION

Schools

There are more than 240,000 schools in the United States, and 90% are public institutions. Of this total, 197,695 are public elementary schools (including kindergartens), and 25,600 are public secondary schools. Private elementary schools number 11,306; private high schools, 3,568. There are 1,751 universities, colleges, and professional schools; 281 public residential schools for the handicapped; 94 private residential schools for the handicapped; 2,099 private commercial schools; 1,391 schools for nursing.

In 1941-42 about one person out of every 4 was enrolled in a school or college. Nearly 21 million children attended elementary schools. There were more than 7 million students in high schools, and 1½ million in colleges, universities, and professional schools.

For the school year 1939-40 expenditures were \$2,696,731,306 for public schools and \$502,862,137 for private schools, totaling \$3,199,593,443.

Teacher-training institutions multiplied tenfold between 1900 and 1940, and many normal schools which had given only one or two years' training beyond the high-school level, raised their standards or became teachers' colleges. In 1942 there were 198 public and 43 private institutions for teacher-training in the United States, exclusive of the departments of education maintained by universities.

Vocational training is assisted by the federal government. In 1941-42, 3,702 trade and industrial programs were conducted in 1,278 schools in 1,007 cities.

About 30 million adults take advantage every year of opportunities for education offered by government agencies, private welfare agencies, and commercial schools.

Average Schooling of Americans

The average American soldier of the Second World War had 3 or 4 years' more schooling than his counterpart in 1917-18. More than half of the 1940-41 selectees attended high school; 8% attended college from one to 4 years.

The number of living high school graduates in the United States in 1940 was 21,070,000. The number of living college graduates was 3,930,000.

Illiteracy in the United States

The average percentage of illiteracy among native white Americans in 1930 was 1.5.

Among foreign-born whites the average percentage of illiteracy in the same year was 9.9, and ranged from 0.3% among Scots and 0.6% among English and Canadians to 36.9% among persons from the Azores.

The average percentage of illiteracy among urban and rural Negroes in the United States was 16.3. Among city Negroes the percentage was about 5.0.

An "illiterate," in the present context, is a person 10 years of age or over who cannot write in any language.

Libraries

Public libraries are maintained in the United States by federal, state, and municipal governments. They contain 106 million books, with a total annual circulation of 500 million vol-

umes, serving 26 million borrowers. College and university libraries contain an additional 63 million volumes.

Institutional libraries in the United States number 16,265. Of these, 6,400 are school libraries; 1,600 are college and university libraries; 6,500 are community libraries; 1,500 are technical and professional libraries; 135 are state libraries; 130 are federal libraries.

The Library of Congress contains more than 6 million, the New York

City Public Library more than 4 million, books and pamphlets.

Important private libraries that have been dedicated to the service of the nation are the Folger Shakespeare Library, Washington, D. C., started by Henry Clay Folger (1857-1930), oil magnate, and the Pierpont Morgan Library, New York City.

The Franklin D. Roosevelt Library at Hyde Park, N.Y., was opened in 1941 and is administered by the Archivist of the United States.

RELIGION

Religious Denominations

There were 256 religious denominations in continental United States in 1936. These denominations supported 199,302 organizations. According to a later estimate made by the Federal Council of the Churches of Christ in America, membership in the 256 religious bodies totalled 72,492,669 as of 1945, an all-time high, and an increase of 3,991,483 over 1943. The church edifices of American religious denominations in 1945 numbered 253,762.

In estimating religious membership, each church was asked to report the number of members according to the definition of membership in that church or organization. In some denominations the term member is limited to communicants; in others it includes all baptized persons; and in still others it covers all enrolled persons.

The Roman Catholic Church in the United States claimed 23,419,701 members in 1945.

The largest of the American Protestant denominations is the Methodist. Its total membership in 1945 was 8,046,129.

The second largest of the American Protestant denominations is the Southern Baptist, with a membership in 1945 of 5,667,926.

American Lutheran church bodies to the number of 20 claimed a membership of 3,046,859 in 1945.

The Presbyterian Church officially reported, as of March, 1944, an inclusive membership of 2,098,091. This tally covered only communicants in full standing.

The Protestant Episcopal Church in 1945 reported a membership of 2,227,524.

The Jewish congregations in 1945 claimed a membership of 4,641,184.

Negro Church Membership

The Negro population of the United States was estimated in 1940 as 12,865,518. In 1936, 5,660,618 belonged to churches. In the same year there were 38,303 Negro church edifices, valued at \$164,531,531. Sunday School scholars in Negro churches were reported as numbering 2,424,800. Negro denominations follow, for the most part, the same religious patterns as those developed by the whites.

Young Men's Christian Association

The Young Men's Christian Association, which celebrated its centenary in 1944, was started in London by George Williams and a group of associates employed by a drapery firm.

From this modest beginning the movement has spread until it embraces more than 19,000 branches in 68 countries and a membership of at least 2,000,000.

By 1945 there were 1,244 associations in the United States with 1,200,777 members; while in Canada there were 79 associations with 49,394 members. Most of the members are under 25 years of age.

In the First World War the

Y.M.C.A. supplied 25,926 special workers, half of whom served overseas with American, French, and other Allied armies. In the Second World War the services of the organization in 519 centers were confined to the continental United States and offshore bases.

The Y.M.C.A. is committed to inter-racial collaboration and has offered extensive services to the Negroes for more than 50 years.

CRIME

Arrests and Imprisonments

The number of men arrested in 1943 for various offenses (ranging from criminal homicide to parking violations) was 411,642. This was more than five times as large as the number of women (79,122) arrested during the same year.

The number of admissions to federal and state penal institutions in 1942 was 72,391. Discharges in the same year were 85,767; escapes, 1,992; deaths, 912.

On March 1, 1945, the number of federal prisoners was 22,085, a 12% increase over 1935. About 4,700 were violators of the Selective Service Act; some were military prisoners sent to civil prisons by Army authorities; some violated Office of Price Administration regulations. Others were imprisoned for illegally wearing uniforms, sabotage, espionage, etc.

According to 1944 statistics on crime in the United States, this is a typical crime-day of 24 hours: 24 felonious killings, 30 rapes, 150 aggravated assaults, 120 robberies, 555 automobile thefts, 749 burglaries, and 2,176 larcenies.

Murder and Manslaughter

In 1943 in this country there were 6,517 cases of murder and of man-

slaughter in which there was no problem of negligence involved. This figure was almost 1,000 less than that of either of the two preceding years.

In the same year there were 3,464 cases of manslaughter resulting from negligence. The figure for 1941 was 4,582; for 1942, 4,019.

Executions

In 1942, 147 persons, including one woman, were executed in this country. Of the prisoners executed, 116 paid the penalty for murder. Twenty-four of the remainder were executed for rape, 6 for espionage, and one for burglary. The six who were executed for espionage were German agents and saboteurs who landed in America from a submarine.

In 1941, 122 men and one woman were executed. Of this group 102 paid the penalty for murder, 20 for rape, and one for burglary.

Lynchings

A sharp decline in the number of lynchings during recent decades is indicated in recorded figures. In 1900 there were 106 lynchings of Negroes and 9 lynchings of white men. Ten years later there were 67 lynchings of Negroes and 9 lynchings of white men. In 1920 there were 53 lynchings of

Negroes and 8 lynchings of white men. In 1943 there were 3 lynchings of Negroes and there was no lynching of a white man.

During the period from 1900 to 1943 a total of 4,707 lynchings took place. Negro victims were 3,416; white men lynched were 1,291.

The three states in which most

lynchings have taken place since 1900 are Mississippi, Georgia, and Texas. The figure for Mississippi is 572; for Georgia, 521; and for Texas, 489. In the six states which comprise the New England group—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont—not a single lynching has taken place.

PENALTIES FOR MURDER IN THE UNITED STATES

State	Penalty	State	Penalty
Alabama	Electrocution	New York	Electrocution
Arizona	Lethal Gas	No. Carolina	Lethal Gas
Arkansas	Electrocution	No. Dakota	Life Imprisonment
California	Lethal Gas	Ohio	Electrocution
Colorado	Lethal Gas	Oklahoma	Electrocution
Connecticut	Electrocution	Oregon	Lethal Gas
Delaware	Hanging	Pennsylvania	Electrocution
Dist. of Col.	Electrocution	Rhode Island	Life Imprisonment
Florida	Electrocution	So. Carolina	Electrocution
Georgia	Electrocution	So. Dakota	Electrocution
Idaho	Hanging	Tennessee	Electrocution
Illinois	Electrocution	Texas	Electrocution
Indiana	Electrocution	Utah	Hanging or Shooting
Iowa	Hanging	Vermont	Electrocution
Kansas	Hanging	Virginia	Electrocution
Kentucky	Electrocution	Washington	Life Imprisonment or Hanging
Louisiana	Electrocution	W. Virginia	Hanging
Maine	Life Imprisonment	Wisconsin	Life Imprisonment
Maryland	Hanging	Wyoming	Lethal Gas
Massachusetts	Electrocution	U. S. (Fed. Gov't.)	Death Penalty
Michigan	Life Imprisonment	Alaska	Hanging
Minnesota	Life Imprisonment	Canal Zone	Hanging
Mississippi	Electrocution	Philippine Islands	Hanging
Missouri	Lethal Gas	Hawaii	Electrocution
Montana	Hanging	Puerto Rico	Life Imprisonment
Nebraska	Electrocution	Virgin Islands	Hanging
Nevada	Lethal Gas		
New Hampshire	Hanging		
New Jersey	Electrocution		
New Mexico	Electrocution		

HALL OF FAME

The Hall of Fame is situated on the campus of New York University in the Bronx, New York City. It is, strictly speaking, an outdoor corridor, rather than a hall, and it contains busts of the men and women honored.

Names to be inscribed in the Hall of Fame are chosen every five years by a college of electors consisting of approximately 100 eminent men and women, representing every state of the Union and several professions.

The names of the 73 persons thus far chosen are appended:

Elected in 1900—John Adams, John James Audubon, Henry Ward Beecher,

William Ellery Channing, Henry Clay, Peter Cooper, Jonathan Edwards, Ralph Waldo Emerson, David Glasgow Farragut, Benjamin Franklin, Robert Fulton, Ulysses Simpson Grant, Asa Gray, Nathaniel Hawthorne, Washington Irving, Thomas Jefferson, James Kent, Robert Edward Lee, Abraham Lincoln, Henry Wadsworth Longfellow, John Marshall, Horace Mann, Samuel Finley Breese Morse, George Peabody, Joseph Story, Gilbert Charles Stuart, George Washington, Daniel Webster, Eli Whitney.

Elected in 1905—John Quincy Adams, James Russell Lowell, Mary

Lyon, James Madison, Maria Mitchell, William Tecumseh Sherman, John Greenleaf Whittier, Emma Willard.

Elected in 1910—George Bancroft, Phillips Brooks, William Cullen Bryant, James Fenimore Cooper, Oliver Wendell Holmes, Andrew Jackson, John Lothrop Motley, Edgar Allan Poe, Harriet Beecher Stowe, Frances Elizabeth Willard.

Elected in 1915—Louis Agassiz, Daniel Boone, Rufus Choate, Charlotte Saunders Cushman, Alexander Hamilton, Joseph Henry, Mark Hopkins, Elias Howe, Francis Parkman.

Elected in 1920—Samuel Langhorne Clemens (Mark Twain), James

Buchanan Eads, Patrick Henry, William Thomas Green Morton, Alice Freeman Palmer, Augustus Saint-Gaudens, Roger Williams.

Elected in 1925—Edwin Booth, John Paul Jones.

Elected in 1930—Matthew Fontaine Maury, James Monroe, James Abbott McNeill Whistler, Walt Whitman.

Elected in 1935—Grover Cleveland, Simon Newcomb, William Penn.

Elected in 1940—Stephen Collins Foster.

Elected in 1945—Booker T. Washington, Thomas Paine, Walter Reed, Sidney Lanier.

MUSEUMS OF SCIENCE

Among the outstanding museums of science in the United States are:

The Smithsonian Institution in Washington, established by statute (1846) under the will of James Smithson, an Englishman, who bequeathed his fortune in 1826 to the United States to found an institution for the "increase and diffusion of knowledge among men."

The National Academy of Sciences in Washington, established by Congress and approved by President Abraham Lincoln in 1863, is affiliated with the National Research Council and maintains an excellent museum.

The American Museum of Natural History, founded in New York City in 1869, has been enriched by gifts from Theodore Roosevelt, J. Pierpont Mor-

gan, and Mrs. Harry Payne Whitney and her children.

The Chicago Natural History Museum (formerly the Field Museum of Natural History) was founded in 1893 through gifts of Marshall Field and others.

Most of the states maintain academies of science or natural history museums in capital cities, for example: Albany, N.Y., Harrisburg, Pa., Springfield, Ill., and Atlanta, Ga.

The Hayden Planetarium in New York City, the Fels Planetarium in Philadelphia, the Buhl Planetarium in Pittsburgh, and the Griffith Observatory and Planetarium in Los Angeles are memorable temples dedicated to science.

AMERICAN FOLKLORE AND LEGENDS

Bowleg Bill. Was called the sea-going cowboy, came originally from Wyoming and often sailed on fishing schooners and whaleships, performing many remarkable feats. At Cape Cod he caught an enormous tuna (known

to the fishermen as "hoss-mackerel") by riding on its back around the harbor, but allowed his captive to escape after bringing it near the beach. During a voyage in the Indian Ocean he charmed a sperm whale by playing

tunes on the skipper's bassoon, which he placed in the whale's "spout-hole"—causing the huge fish to produce constant loud music for many years afterward.

Febold Feboldson. The operator of an ox train from Kansas City to San Francisco in 1848, sold hot sand from Death Valley to "gold rushers" who scattered the sand over the petrified snow which had covered the plains all summer. The land thus became very warm, and although rain fell for forty days and forty nights, the drops did not reach the ground but became steam that cooled into dense fog. Using imported fog-cutters from London, Feboldson solved the problem by slicing the fog into long strips which he laid along the roads.

John Henry. A gigantic Negro steel driver, was the fastest and most powerful member of a gang hired to dig a tunnel through the Allegheny Mountains. He frequently used two enormous hammers, one in each hand, and worked with such speed that his employer made a bet with a salesman that John Henry could "beat a steam drill any day." The Negro drilled two holes seven feet deep, while the steam drill made one hole nine feet deep, and the salesman lost the wager. That night John Henry died in his sleep when a blood vessel burst; he was buried in Big Bess Tunnel, West Virginia, with his twelve-pound hammer (named Lucy after his sweetheart) in his hand.

Johnny Appleseed. His real name was John Chapman, lived from 1775 until 1847, and has become a legend of early American frontier life because of the many apple orchards he planted in Ohio, Indiana, and Illinois during his solitary wanderings. From the cider presses of western Pennsylvania he salvaged thousands of apple seeds which he gave to pioneers who were starting westward in covered wagons. He traveled down the Ohio River with two canoes lashed together and filled

with seeds that he planted in promising locations, but all his later journeys through the wilderness were made on foot. According to the tales related about him, Johnny Appleseed was immune to snakebite, had remarkable physical endurance as well as the ability to charm wild animals, and spread the teachings of Swedenborg among the frontier settlers.

Old Stormalong. Many tales are related about him by the skippers of Cape Cod. Was the "bos'un" of numerous whaling expeditions. During one voyage an octopus stopped the ship by holding the anchor, but he leaped into the sea and tied the creature's arms into knots. The most remarkable vessel on which he sailed was the "Courser"; the masts reached as high as the clouds, the officers and men rode horses, and Old Stormalong gave his orders through a megaphone. He is said to have dug the Panama Canal by steering the "Courser" through the Isthmus of Panama during a severe storm.

Paul Bunyan. A gigantic lumberjack who was known as the "mightiest of the loggers." Is said to have created Colorado Canyon by dragging his pick along the ground during his journey on foot to Oregon. He could chop down the largest tree with only two cuts of his axe. Babe, the Blue Ox (his most prized possession) ate enormous amounts of hot cakes, and straightened a crooked road 22 miles in length. When straight the road was only eight miles long; Paul sold the other 14 miles to Chicago for use as a boulevard. According to some lumber camp authorities, he still lives in the forests of the northwest, but is never seen because he is too quick for the eye to detect.

Pecos Bill. Became the most famous cowhand in the West, is said to have created the Rocky Mountains to save the cattle country from a Pacific tidal wave. He invented the lariat, teaching

the cowboys to rope cattle, and rode an enormous horse called the Widow-Maker which ate dynamite and nitroglycerine. Bill married an Indian squaw named Blue Foot Sue whom he threw into the sky so far that he knew she would die of starvation before she returned to earth, so he shot his wife to save her from such a fate. He exploded after swallowing a handful of fish hooks in nitroglycerine, and the spot where his body was found is known as the Burned Lands.

Skippoweth Branch. Known in the frontier days of the West as the bully of Salt River, was willing to walk ten miles at any time for a fight. Sometimes called Big Snag of the Desert, he is said to have lived on the mountains and eaten thunder, wearing a neckcloth made of chain lightning. He could "outscram seven catamounts

"tied together," and claimed that he was never able to reach his full height until the clouds were lifted.

Stackalee. A Negro about whom many stories are told in Missouri, was allegedly born at St. Louis in 1861 with a veil over his face and a complete set of teeth. While drunk he sold his soul to the devil—thus gaining the power to transform himself into an animal at will, or to become so small that he could get into a bottle. He was being beaten in a fight with Jesse James when the devil approached, stirring up a cloud of dust that temporarily blinded the outlaw. Stackalee's wife was named Stack O'Dollars; she had two diamond teeth with gold filling that gleamed like flashlights. He was sentenced to jail after shooting Billy Lyons at the White Elephant Barrel House in St. Louis.

THE WORLD

NATIONS OF THE WORLD

Afghanistan

Population: Estimated 12,000,000.

Area: 245,000 square miles.

Capital: Kabul.

Leading Cities: Kabul, Kandahar, Herat, Mazar-i-Sharif.

Geographic Features: Located in southwestern Asia, Afghanistan reaches its highest elevation (25,425 feet) in the Hindu Kush Mountains in the northeast, while other lofty mountain ranges are the Western Sulaiman in the southeast and the Bend-i-Turkestan in the northwest. The principal rivers are the Helmand—from northeast to southwest through the center of the country, the Oxus (or Amu Darya) which forms part of the north boundary, the Hari Rud in the west, and the Kabul flowing through Khyber Pass into India in the east. Largest of the lakes are Hamun-i-Sawaran and Hamun-i-Farah in the west, and Nawar in the east.

Industries: Agriculture, mainly fruit, barley, wheat, lentils, millet, rice, corn, sorghum, tobacco; numerous fat-tailed sheep are raised for wool and hides. The chief manufactured products are silk, felts, carpets and drugs; copper, iron, and lead are mined.

Interesting Features: There are no railroads in Afghanistan, merchandise being transported on camels and ponies. Kabul contains a university (founded in 1932) and a radio station.

History: In 300 B.C. a part of Afghanistan, peopled by nomad tribes

and centering about Kabul, was included in the Greek kingdom of Bactria. Little is known of the country's early history until the dynasty of the sultan Mahmud (11th century) when Ghazni—then the capital—was one of the most splendid cities in the world. The Durani dynasty, which began in 1747 with the rule of Ahmed Shah, continues to the present time. A central government was established in Afghanistan by the British after two wars (1839 and 1878-80), and in 1932 a new constitution declared the country completely independent.

Albania

Population: About 1,000,000.

Area: 10,629 square miles.

Capital: Tirana.

Leading Cities: Tirana, Scutari, Korytsa, Durazzo.

Geographic Features: Located on the west side of the Balkan peninsula in southeast Europe, Albania is mountainous except for a narrow region along the Adriatic coast; the Albanian Alps in the north reach a height of over 8,000 feet. The principal rivers are the Drin in the north, and the Voyutsa and Semeni in the south. Largest of the lakes are Ohrid and Prespa in the east and Scutari in the north.

Industries: Agriculture, mainly sheep and cattle raising, dairying, corn, olive oil, tobacco, cheese; manufacturing, mainly flour mills. Wool, hides,

and furs are important industries. The mineral resources are largely undeveloped although copper is mined.

Interesting Features: The chief cities are connected by air lines but there are few good highways; no state religion exists, and few schools are operated.

History: Peopled by Goths in the 4th and 5th centuries, Albania became (in the 6th century) a part of Justinian's Eastern Empire, and was ruled by the Serbians from the 7th until the 14th century. Under the domination of Turkey from the 15th century until 1912, Albania was thrown into a state of anarchy by the First World War, but was admitted as an independent country to the League of Nations in 1920, became a republic in 1924 and a monarchy in 1928. In 1939 Italian forces conquered Albania; it was occupied in 1940 by the Greek army which was defeated by Italy the following year. Albania was liberated in 1944.

Algeria

(See under French Colonies).

Andorra

Andorra is a republic in the Pyrenees Mountains which occupies an area of 191 square miles and has a population of 5,200. It is under the suzerainty of France and the Spanish Bishop of Urgel. Sheep-raising is the principal industry. The inhabitants speak Catalan.

Arabia

Population: Estimated 10,000,000.

Area: Estimated 1,000,000 square miles.

Political Divisions: Saudi-Arabia, including Nejd, Hejaz, and Asir; Yemen, Aden, Kuwait, Hadhramaut, Bahrein Islands, Muscat, and Oman.

Leading Cities: Mecca, Hodeida, Jidda, Hofuf, Kuwait, Medina, Sana.

Geographic Features: Arabia is a

peninsula in southwest Asia between the Red Sea in the west and the Persian Gulf and the Gulf of Oman in the east. The Nefud and Ruba Al Khali deserts, in the north and south respectively, cover large areas. The highest elevations are Mount Manar (10,561 feet) in Yemen in the southwest, and Jebel Sham (9,902 feet) in Oman in the southeast. There are no rivers, but streams flow to the sea—during the rainy season—through river beds that are normally dry.

Industries: Agriculture, mainly coffee, dates, wheat, barley; manufacturing, mainly Arab clocks. Pearls are exported from Kuwait and the Bahrein Islands, while other important products are hides and wool. Petroleum resources in Saudi-Arabia are being developed.

Interesting Features: The Mosque of the Prophet at Medina, enshrining the tomb of Mohammed; a mosque at Mecca containing the Kaaba (a shrine) and the black stone allegedly given to Abraham by Gabriel.

History: In the second century B.C. Arabia was peopled by a Semitic race known as the Sabacans, and later by the Himyarites who were defeated in the fourth century A.D. by Christian Abyssinians. In 622 the prophet Mohammed began his religious reign, and the Carmathians dominated the country from 880 until 969. Trade with the east did not begin until the 16th and 17th centuries. During the 18th century Mohammed ibn Wahab secured control of central and eastern Asia, but was defeated by Ibrahim Pasha (vice-roy of Egypt) in 1818. In later years Arabia was torn by numerous internal conflicts and revolts; the kingdom of Saudi-Arabia was organized in 1932 with Ibn Saud as ruler.

Argentina

Population: 13,518,239.

Area: 1,078,278 square miles.

Capital: Buenos Aires.

Leading Cities: Buenos Aires, Rosario, Cordoba, La Plata, Avellaneda, Santa Fe, Tucuman, Bahia Blanca, Rio Cuarto, Mendoza, Parana.

Geographic Features: Argentina occupies the greater portion of southern South America; the highest peaks are Aconcagua (22,834 feet), Icacanguassi (21,400 feet), and Veladeres (21,000 feet) which are part of the Andes Mountains in the west and extend into Chile. In the northeast are the Parana and Picomayo rivers forming the boundary between Argentina and Paraguay; other important rivers are the Uruguay and La Plata in the east, the Negro, Colorado, and Desado in the south, and the Vermejo in the west. The principal lakes include San Martin and Viedma (which are partly in Chile) and Argentina in the south, as well as Mar Chiquita in the north.

Industries: Agriculture, mainly wheat, corn, oats, flax, fruit, cotton, tobacco, sugar, alfalfa, wine; manufacturing, mainly flour mills and meat-packing plants. Sheep, cattle, horses, pigs, and goats are raised, and many hides are exported. Minerals include silver, gold, copper, petroleum.

Interesting Features: 157 parks and plazas in Buenos Aires; national universities at Cordoba, La Plata, Tucuman, Mendoza, and Rosario; compulsory service in the army for men 20 to 45 years of age.

History: Originally peopled by Indians, the country was explored by Juan Diaz de Solis in 1515, and the first settlement was made at Buenos Aires in 1536. Revolting against Spain in 1816, the Spanish inhabitants established an independent republic that was torn by numerous civil wars between the Federalists and the Unitarios. From 1865 until 1870 Argentina was at war with Paraguay. In 1943 a military clique sympathetic to fascism took power. Relations with the Axis were broken in 1944. Argentina declared war on Germany in 1945.

Australia

(See under British Commonwealth of Nations).

Belgium

Population: 8,386,553.

Area: 11,755 square miles.

Capital: Brussels.

Leading Cities: Brussels, Antwerp, Liege, Ghent, Malines, Bruges, Ostend.

Geographic Features: Located in northern Europe, Belgium is bounded on the north by the Netherlands and the North Sea, on the east by Germany and Luxemburg, and on the south by France. The hilly Ardennes region rises in the southwest to a maximum height of 2,200 feet at Baraque Michel near Spa, but the remainder of the country is low-lying. The principal rivers are the Schelde in the northwest and the Meuse in the southeast.

Industries: Agriculture, mainly wheat, oats, barley, rye, sugar beets, fodder beets, potatoes, tobacco; cattle, swine, and horses are raised. Important manufactured products include iron work, lace, rayon, gloves, linen, locomotives and steam engines, firearms, bronze, porcelain, glass, chemicals, cement; coal and zinc are mined.

Interesting Features: Universities at Ghent, Liege, Brussels, and Louvain; the Cathedral of St. Baron in Ghent; over 50 canals with a total length of more than 3,000 miles; the oldest railway system in Europe.

History: In the 4th century B.C. the country was peopled by Altic tribes who were mixed with Germanic races at the time of the Roman conquest. The dukes of Burgundy dominated the entire region (which had been divided into states) in the 15th century, and ceded the realm to Spain. The Belgian Netherlands became a part of Austria (1713) and were annexed to France during the French Revolution, later united with Holland into a kingdom called the Netherlands. In 1830 the

Belgians revolted and declared their independence. Belgium was invaded and occupied by the Germans from 1914 until the end of the First World War in 1918, and was again invaded by Germany in 1940 but liberated by the Allies in 1944.

Belgian Colonies

Belgian Congo, Ruanda, and Urundi

Located in central Africa, the Belgian Congo lies between Angola and Northern Rhodesia on the south, and French Equatorial Africa and Anglo-Egyptian Sudan on the north. The area is 902,082 square miles; the population is 10,383,929. Leopoldville (the capital), Elisabethville, and Likasi are the leading towns, and the major products include coffee, rubber, cotton, palm oil, ivory, sugar, cocoa. The principal minerals are diamonds, gold, copper, cobalt, tin, silver, radium, coal.

Ruanda and Urundi are districts lying east of Belgian Congo and west of Tanganyika. The total area covers 20,535 square miles; the estimated population is 3,775,335. Usumbura is the leading town, and cattle-raising is the principal industry.

Bhutan

Bhutan is a semi-independent state in the Himalayas between Tibet and British India. Its capital is Punakha. It occupies an area of 18,000 square miles and has a population of 300,000. Agriculture is the principal industry. The country is ruled by a maharajah.

Bolivia

Population: 3,426,296.

Area: 386,000 square miles.

Capital: La Paz.

Leading Cities: La Paz, Cochabamba, Potosi, Santa Cruz, Oruro, Sucre.

Geographic Features: Located in the west central portion of South America, Bolivia is traversed by the Andes

Mountains. The highest peaks are Sahama (22,349 feet), Sorata (21,286), Illampa (21,184), Illimani (21,181), and Huaina Potosi (20,260). The Gypore River forms the greater part of the northern boundary; other important rivers are the Madre de Dios and Beni in the northwest, as well as the Magdalena and Grande in the east. Largest of the lakes are Titicaca (partially in Peru) and Poopo in the west.

Industries: Agriculture, mainly potatoes, coffee, cacao, barley, rice, cinchona bark, rubber, coca leaves (the source of cocaine); sheep and cattle are raised for wool and hides. Manufactured articles are obtained by importation. The principal minerals include tin, copper, silver, zinc, lead, antimony, bismuth, wolfram, gold, borate of lime, petroleum, tungsten.

Interesting Features: The University of Sucre (founded in 1624); the huge cathedral at La Paz, accommodating 12,000 worshippers; compulsory military service for all men from 19 to 50 years of age.

History: Bolivia was originally peopled by Inca Indians, and was called the Audencia of Charcas in 1559 after the native tribes had been conquered by Gonzalo Pizarro. The country was a dependency of Peru until it became part of the viceroyalty of La Plata (or Buenos Aires) in 1776, and gained its independence from Spain after the battle of Ayacucho in 1824. Under the guidance of Simon Bolivar a republic was established. Bolivia severed diplomatic relations with Germany in 1917, and signed the Peace Treaty of 1919; the president and the cabinet declared war on Germany, Italy, and Japan in 1943.

Brazil

Population: 41,356,605.

Area: 3,275,510 square miles.

Capital: Rio de Janeiro.

Leading Cities: Rio de Janeiro, Sao

Paulo, Recife (Pernambuco), Sao Salvador (Bahia), Porto Alegre, Belem (Para), Bello Horizonte, Santos, Fortaleza (Ceara), Maceio, Nichteroy, Joao Pessoa (Parahyba), Manaus, Sao Luiz.

Geographic Features: Occupying more than half of South America, Brazil consists in its interior of a lofty plateau with a maximum elevation of 3,000 feet, ridged by numerous mountain ranges; the highest peak is Mount Itambe (5,960 feet) in the southwest. The principal rivers include the Amazon, Madeira, Negro, and Tapajoz in the north, the Araguaia, Sao Francisco, and Parnahiba in the east, as well as the Parana and Iguassu in the south, where are located Iguassu Falls. Marajo Island lies at the mouth of the Amazon.

Industries: Agriculture, mainly cotton, rubber, coffee, rice, sugar, tobacco, tea, cacao, wine, oranges; sheep and cattle are raised for wool and hides.

The chief manufactured products are textiles, -lumber, cement, Carnauba wax; minerals include manganese ore, diamonds, coal, iron ore, petroleum, gold, monazite, mica, platinum, copper ore, rock crystal.

Interesting Features: University of Brazil at Rio de Janeiro; a law prohibiting divorces; 512 airplane landing fields; compulsory military service for all men from 18 to 45 years of age.

History: Originally peopled by Indian tribes, Brazil was explored in 1500 by Pedro Alvares Cabral (a Portuguese navigator), and was under the domination of Portugal until an independent kingdom was established in 1822. The United States of Brazil, a republic, was organized in 1889 after Dom Pedro II had been driven from the throne by a revolution. Brazil declared war on Germany and Italy in 1942, and sent an expeditionary force in 1944 to assist the American Fifth Army in war operations.

BRITISH COMMONWEALTH OF NATIONS

Great Britain

Population: 47,888,958.

Area: 94,279 square miles.

Capital: London.

Leading Cities: London, Glasgow, Birmingham, Liverpool, Manchester, Sheffield, Leeds, Edinburgh, Belfast, Bristol, Dublin, Hull, Bradford, West Ham, Newcastle-on-Tyne, Stoke-on-Trent, Nottingham, Portsmouth, Leicester, Croydon, Cardiff, Salford, Plymouth, Sunderland, Willesden.

Geographic Features: Great Britain, also known as the United Kingdom or the British Isles, comprises two large islands off the northwest corner of Europe and includes England, Scotland, Wales, Northern Ireland, and Ireland. The principal mountain ranges include the Ambrian in Wales, the Pennine in northern England, the Grampians in Scotland, where the high-

est peak is Ben Macdhui (4,296 feet), the Cheviot Hills separating England from Scotland, and the Cumbrian in northwest England rising to a maximum altitude of 3,210 feet at Scafell Pike. The principal rivers are the Thames, Severn, Ouse, Trent, Wye, and Avon in England, the Tweed and Forth in Scotland, and the Shannon, Blackwater, Nore, and Suir in Ireland. Among the largest lakes are Loch Lomond in Scotland and Lake Neagh in Northern Ireland.

Industries: Agriculture, mainly grains, beans, peas, potatoes, mangold, turnips, dairying; many cattle, horses, and sheep are raised, and fishing is an important industry. The chief manufactured products include textiles, iron and steel, chemicals, paper, leather, machinery, vehicles; shipbuilding yards are extensive, and much liquor and

tobacco products are exported. Coal, iron ore, limestone, gravel, clay, slate, salt, sandstone, chalk, gypsum, tin, lead, silica rock, and barytes are mined.

Interesting Features: In London, the Houses of Parliament, the historic Tower built in the 11th century, Westminster Abbey, Buckingham Palace, St. Paul's Cathedral; Oxford University; the birthplace of William Shakespeare at Stratford-on-Avon; the cathedral at Canterbury; Edinburgh Castle and Holyrood Palace in Scotland; Cambridge University.

History: Great Britain was originally peopled by a mixed race known as the Celts, who were conquered by Julius Caesar in 55 B.C. and remained under Roman domination until the 5th century when the Anglo-Saxon king, Alfred, came into power. Subjugated by Denmark in 1017, the country was ruled by the Danes for thirty years, and Edward the Confessor became king in 1042. William of Normandy invaded England in 1066, dividing much of the nation among his Norman followers. Henry II began the conquest of Ireland in 1154, and a large section of France was united with British territory, but the French dominions were lost during the reign of John, the brother and successor of Richard the Lion-Hearted. In 1215 John was forced by the barons to sign the Magna Charta, the first charter of English liberties. Wales was conquered by Edward I (1277-83); in 1314 Robert Bruce defeated the armies of King Edward II, thus establishing the independence of Scotland. During the Hundred Years' War, England subdued a great portion of France but was finally defeated by the French in 1428. Under Elizabeth (1558-1603) Protestantism was established in Great Britain, and many colonies were acquired. England and Scotland were united into a single kingdom in 1707. The House of Hanover (Brunswick)

gained the throne in 1714; in 1759-60 Canada was taken from France, and in 1776 the British colonies in America became independent. During the first half of the 19th century England organized colonies in South Africa and Australia, extending its rule in India westward as far as the Indies. The reign of Queen Victoria (1837-1901) was the longest in English history. In 1914 Great Britain declared war against Germany following the latter's invasion of Belgium. Great Britain declared war on Germany again in 1939 when Germany invaded Poland. England's cities were subjected to heavy and destructive bombing attacks during the war.

Ireland (Eire)

Population: 2,989,700.

Area: 27,137 square miles.

Capital: Dublin.

Leading Cities: Dublin, Cork, Limerick (Limerick), Waterford.

Geographic Features: A part of the British Isles, Ireland occupies an island separated from Wales by St. George's Channel and from England by the Irish Sea. The island consists mainly of a plateau; the mountain ranges include Wicklow in the east, Donegal in the northwest and Kerry in the southwest. Numerous bays indent the coastline. The most important rivers are the Shannon in the central region, and the Blackwater, Suir, and Nore in the south. Largest of the many lakes are Neagh, Erne, Foyle, Corrib, Ree, and Derg.

Industries: Agriculture, mainly grains, potatoes, sugar beets, turnips, cabbage, flax, livestock-raising; manufacturing, mainly shipbuilding, linen weaving, rope and twine, hosiery, aircraft, soap, clothing. Among the minerals are chalk, fireclay, granite, limestone, flint, rock salt, sandstone, gravel.

Interesting Features: Trinity College in Dublin; the famous Blarney Stone in an ancient castle northwest

of Cork; the scarcity of wild animals and total lack of snakes; the Gaelic language.

History: Ireland was originally peopled by Celtic tribes, to whom St. Patrick introduced Christianity in the 5th century. The Vikings settled on the coast in 700 but were expelled in 1014; the British conquest of the island began in 1169 during the reign of Henry II, and was completed in the 15th century by Henry VIII who became king of Ireland. Violent revolutions against English rule occurred while Elizabeth was queen, again in 1641-52, in 1689-91, and in 1798. The parliamentary union of Ireland with Great Britain was consummated in 1801, and the Roman Catholic Emancipation Act became a law in 1829. During the great famine of 1840-50, nearly 1,000,000 inhabitants perished, resulting in wholesale eviction of tenants by the landlords and the passage of Gladstone's first Land Act (1870), which aided tenants in becoming proprietors of the land. In 1907 the Irish Free State was established, and Northern Ireland (Ulster) became a separate division in 1913. Irish forces joined the British in fighting against Germany in the First World War. Under President Eamon de Valera, Ireland remained neutral in the Second World War.

British European Colonies

The British colonies in Europe consist of Gibraltar, Malta, Gozo, and Comino. Gibraltar is a fortified rock 1,396 feet in height, with an area of almost two square miles, and is located in southern Spain on the Strait of Gibraltar. A harbor has been built at the base of the fort, and the estimated population is 20,399.

Malta occupies an island 95 square miles in area, lying south of Sicily in the Mediterranean Sea and having a population of 268,668. Malta put up a heroic defense against air bombard-

ment by Axis planes during the Second World War. Near Malta are the islands of Gozo (27 square miles) and Comino (one square mile).

Union of South Africa and Southwest Africa

The Union of South Africa comprises the Cape of Good Hope, Orange Free State, Natal, and Transvaal; the total area is 472,550 square miles, and the estimated population is 10,708,500. The capital is Pretoria, but Johannesburg is the largest city. Corn, fruit, wheat, tobacco, dairy products, and sheep-raising are important, and the principal minerals include gold, diamonds, copper, tin, coal, iron ore, lead, manganese, and platinum. The Union of South Africa participated in both the First and Second World Wars.

Southwest Africa, with a native population (1936) of 314,194 and an area of 317,725 square miles, lies south of Angola between Bechuanaland and the Atlantic Ocean. The capital and leading city is Windhoek.

British South Africa

British South Africa comprises Southern Rhodesia, Northern Rhodesia, Basutoland, Bechuanaland, Swaziland. Southern Rhodesia is bounded on the east by Mozambique, and is separated from Northern Rhodesia by the Zambezi River. The estimated population is 1,448,393, and the area is 150,333 square miles. Salisbury is the capital and chief city; the principal exports include tobacco, cotton, corn, gold, asbestos. Victoria Falls in Southern Rhodesia are the most impressive natural spectacle in southern Africa, being 343 feet in height.

Northern Rhodesia lies east of Angola and south of Belgian Congo and Tanganyika. The estimated population is 1,381,829, and the area is 290,320 square miles; Lusaka is the capital and chief city. Important minerals include

copper, cobalt, gold, zinc, manganese, vanadium.

Basutoland, a reservation for South African natives, lies southwest of Mozambique in South Africa and covers an area of 11,716 square miles; the estimated population is 660,650. Livestock is raised, and grains and wool are produced.

Bechuanaland lies north of the Union of South Africa and west of Southern Rhodesia. The area, including the Kalahari Desert in the south, is 275,000 square miles; the population in 1936 was 265,756. Many cattle are raised.

Swaziland lies southwest of Mozambique and covers an area of 6,706 square miles; the population in 1936 was 156,715. The chief products include corn, tobacco, gold, vegetables, sweet potatoes.

British West Africa

The British West African colonies include Nigeria, the British Cameroons, Gambia, Sierra Leone, the Gold Coast, Togoland. Nigeria lies between French West Africa on the north and the Gulf of Guinea on the south. The population is 21,040,720, and the area is 372,764 square miles. Lagos is the capital, but the largest city is Ibadan; the principal exports include tin, cocoa, hides, cotton lint, palm oil.

The British Cameroons, with an area of 34,081 square miles and a population of 868,673, lie between the French Congo and British Nigeria. The capital and chief town is Buea, and the major exports include cacao, bananas, rubber, palm oil, ivory, cloves, vanilla.

Gambia comprises St. Mary Island at the mouth of the Gambia River, and a 200-mile-long strip of territory extending inland between Senegal and the French Sudan. The total area is 4,068 square miles, and the popula-

tion is estimated at 199,520. Bathurst is the capital and chief city.

Sierra Leone is located on the western coast of Africa between Liberia and French Guinea. The total area is 27,699 square miles, and the estimated population is 1,672,000. Freetown is the capital and chief city; ginger, gold, diamonds, palm oil, piassava are produced.

The Gold Coast, with a population of 3,962,520 and an area of 99,902 square miles, is bounded on the south by the Gulf of Guinea and on the west by the French Ivory Coast. The capital and chief town is Accra, and the major exports include gold, diamonds, cacao, manganese.

Togoland lies between Dahomey and the Gold Coast, and is divided between Great Britain and France; the area governed by the British is 13,041 square miles, with a population of 391,473.

British East Africa

British East Africa comprises Kenya, the Uganda Protectorate, Tanganyika, and Nyasaland Protectorate. Kenya's estimated population is 3,534,862, and its area is 224,960 square miles; the capital is Nairobi. The Uganda Protectorate, lying east of Belgian Congo, has an estimated population of 3,865,608, and an area of 93,381 square miles; the capital and leading city is Entebbe. Tanganyika (formerly German East Africa) was acquired by Great Britain in 1918, and has an estimated population of 5,231,983, with an area of 360,000 square miles; coffee, cotton, ivory, hides, beeswax, and ground nuts are exported. Nyasaland Protectorate has a population of 1,684,194, and an area of 37,374 square miles; the capital and chief city is Zomba. Tea and tobacco are grown.

Minor Colonies

The minor British East African colonies are Zanzibar, Mauritius, Sey-

chelles, Somaliland. Zanzibar is an island 23 square miles in area, lying 23 miles east of Tanganyika and having an estimated population of 250,000, including the island of Pemba (380 square miles) which is 30 miles northeast of Zanzibar. Mafia Island is located northeast of the Tanganyika coastal town of Kilwa. Cloves, coconuts, copra, pottery, soap, jewelry, mats, rope are exported from Zanzibar.

Mauritius is an island lying in the Indian Ocean about 500 miles east of Madagascar, having a population of 420,861 and an area of 720 square miles. The capital and chief town is Port Louis. Rum, sugar, aloe fiber, copra are exported.

The Seychelles comprise a group of numerous islands located in the Indian Ocean northeast of Madagascar. Their total area is 156 square miles, and the estimated population is 32,150; Victoria is the capital and chief town. Coconuts, cinnamon, vanilla, and phosphate are among the exports.

British Somaliland is bounded on the north by the Gulf of Aden, on the east by Italian Somaliland and on the southwest by Ethiopia. The area is 68,000 square miles, and the population numbers 345,000. Berbera is the capital and chief town; the principal exports are hides, resins, and gums.

India

Population: 388,997,955.

Area: 1,581,410 square miles.

Capital: New Delhi.

Leading Cities: Calcutta, Bombay, Madras, Hyderabad, Lahore, Ahmedabad, Delhi, Cawnpore, Amritsar, Lucknow, Howrah, Karachi, Nagpur, Agra, Benares, Allahabad, Poona, Bangalore, Madura, Dacca, Sholapur, Srinagar, Indore.

Geographic Features: Comprising a vast peninsula in southern Asia, India lies between the Bay of Bengal and the Arabian Sea, extending northward to Afghanistan, Sinkiang, and Tibet. The

highest peaks are Mount Godwin-Austin (26,470 feet) in the Karakoram range, and Kamet Mountain (25,550 feet) near the boundary of Tibet. The Thar or Indian Desert covers a large portion of the province of Rajputana. Among the principal rivers are the Ganges and Brahmaputra in the east, the Indus in the west, and the Godavari in the south. The island of Ceylon is separated from the southeast coast by the Gulf of Manar and Palk Strait.

Industries: Agriculture, mainly rice, jute, coffee, sugar cane, linseed, grains, cotton, tobacco, tea, opium, castor seed, indigo, mustard; many cattle are raised, and the forests yield teak, sandalwood, ironwood, deodar, and other valuable timber products. The important minerals include gold, silver, coal, lead, manganese, petroleum, tin, salt, iron, copper, tungsten, zinc.

Interesting Features: Sixteen universities; more than 45 races and 2,400 castes and tribes; the famed Taj Mahal at Agra; about 43,000 miles of railway.

History: Originally peopled by Hindu tribes, India was invaded in prehistoric times by the Aryans (Indo-Europeans) who established numerous independent states. Buddha lived in the 6th century B.C., and Buddhism became the prevailing religion until several hundred years after the start of the Christian era. In 327 B.C. Alexander the Great conquered part of India, organizing a Greek kingdom. Delhi was captured by Mahmud of Ghazni (a Mohammedan sultan) in 1001 A.D., and by the Mongol chief Tamerlane in 1398. Under the rule of the Mongols, India reached great heights of splendor—particularly during the reigns of Baber, Akbar, and Aurangzebe. The Portuguese navigator Vasco da Gama visited India in 1498, and for the next hundred years Portugal maintained a monopoly on Indian trade. The English East India Company and the French East India Company, chartered in 1600 and 1664

respectively, were bitter competitors until England gained control of India by defeating the French at Plassey in 1757. After a revolt by the sepoys of the Bengal army, Queen Victoria was proclaimed Empress of India in 1877. The Hindus were loyal to the English cause during the First World War, with the exception of native Moslems who sympathized with Turkey. After 1918 Mahatma Gandhi became a powerful leader, demanding complete independence for India. The government of India participated in the Second World War against the Axis powers.

Burma and Small Asiatic Colonies

Burma is bounded on the south by the Bay of Bengal, on the north by Tibet and on the east by China, French Indo-China, and Thailand. The population in 1931 was 14,667,146; the area is 261,610 square miles. The chief cities are Rangoon, the capital, and Mandalay. Among the most important products are silver, tin, teakwood, petroleum, rubies, tea, rice, tungsten, spices. Burma was occupied by the Japanese during the Second World War.

Aden, comprising 112,000 square miles including the protectorate areas, occupies the southwestern part of the Arabian peninsula between Yemen and the Gulf of Aden. The population in 1931 was 48,338. A useful coaling station, Aden produces salt and cigarettes.

Ceylon is separated from southeastern India by the Gulf of Manar and Palk Strait, and has an area of 25,332 square miles. The population in 1931 was 5,312,548; the capital and leading city is Colombo. Among the chief products are tea, rice, ebony, rubber, coffee, tobacco, vanilla, cinnamon.

Cyprus is an island in the Mediterranean Sea about 40 miles south of Turkey, and has an area of 3,572 square miles. The population is estimated at 383,967; Nicosia is the capi-

tal and chief city. Among the important products are grains, olives, cotton, marble, sponges, fruit.

Hong Kong, comprising an island 32 square miles in area, is located at the mouth of the Canton River in southeastern China, and the estimated population is 1,071,893. Including Kowloon on the Chinese mainland, the entire colony now covers 391 square miles. Hong Kong was captured by the Japanese in 1941 and retaken by the British in 1945.

Maldiv Islands, located in the Indian Ocean about 400 miles southwest of Ceylon, have a total area of 115 square miles; the population in 1931 was 79,000. Fruit, coconuts, and millet are the chief products.

Socotra is an island in the Arabian Sea about 150 miles northeast of Italian Somaliland, and has an area of 1,400 square miles. The population is 12,000; the principal town is Tamridah. Livestock-raising is the most important industry. Other British dependencies include the Andaman Islands (area 2,508 square miles) and the Nicobar Islands in the Bay of Bengal.

British Malaya

The Straits Settlements, located in southeastern Asia, have an estimated population of 1,435,895 and an area of 1,356 square miles; the capital and chief city is Singapore. The Malay States occupy the southern part of the Malay peninsula between Malacca Strait and the South China Sea, and consist of Perak, Negri, Selangor, Pahang, Sembilan, Johore, Perlis, Kedah, Trengganu, and Kalantan; the total population is 4,124,549, and the area covers 49,610 square miles. Tin, rubber, tapioca, rice, sugar, pepper, copra, camphor, coconuts are among the exports.

British North Borneo occupies the northern portion of the island of Borneo off the coast of southeastern Asia,

and has an estimated population of 270,223 and an area covering 29,500 square miles. Gum, timber, rice, and sago are among the exports.

Brunei lies between British North Borneo and Sarawak, and has an estimated population of 30,125 and an area of 2,226 square miles.

Sarawak occupies the northwest part of the island of Borneo, and has a population of 490,585; the area is 50,000 square miles. Kuching is the capital, and the principal exports are pepper, gold, sago, petroleum, and plantation rubber.

The colonies comprising British Malaya were occupied by the Japanese in 1941 and 1942, and liberated in 1945.

British Oceania

British Oceania comprises the Fiji Islands, Tonga or Friendly Islands, the British Solomon Islands, Gilbert and Ellice Islands, and Pitcairn Island.

The Fiji Islands have a population of 220,787, a total area of 7,083 square miles, and are located in the South Pacific Ocean east of Australia. Suva is the capital; coconuts, bananas, rice, sugar cane, maize, tobacco are among the exports. The population of the Tonga Islands is estimated at 34,130, and the total area is 256 square miles. The British Solomon Islands—including Guadalcanal, San Cristobal, Malaita, Ysabel, Choiseul, Shortland, Romongo, Rendova, Gizo, Russell, and New Georgia—have an estimated population of 94,105 and an area of 11,700 square miles. The Gilbert and Ellice Islands Colony, which exports phosphates and copra, includes in its area (180 square miles) the Ellice Islands, Christmas Islands, Fanning, Washington and Ocean islands, the Gilbert Islands and the Phoenix group.

Pitcairn Island's population is 193 and its area is two square miles; the colony is noted principally because the mutineers of the Bounty landed there

in 1790. Adjacent to Pitcairn are the islands of Ducie, Oeno, and Henderson.

Many of the islands of British Oceania were the scene of bitter and hard-fought battles between the Allies and the Japanese during the Second World War.

Australia

Population: 7,177,590.

Area: 2,974,581 square miles.

Capital: Canberra.

Leading Cities: Sydney, Melbourne, Adelaide, Brisbane, Perth, Newcastle, Hobart, Ballarat.

Political Divisions: Western Australia, Queensland, Northern Territory, South Australia, New South Wales, Victoria, Tasmania.

Geographic Features: Located south of eastern Asia between the Indian and Pacific oceans, Australia is separated from the Netherlands Indies in the north by the Timor and Arafura seas. The principal mountain ranges are the Eastern Highlands, where Mount Kosciusko rises 7,330 feet, the Musgrave Range in South Australia containing Mount Woodroffe (5,200 feet), and the MacDonnell Range in Northern Territory. Four deserts occupy a large area: the Great Sandy, Gibson, and Great Victoria in Western Australia, and the Arunta Desert in Northern Territory. The principal rivers include the Darling, Murray, Lachian, Barwon, and Murrumbidge in the southeast, and the Flinders, Roper, Victoria, and Fitzroy in the north. Among the largest lakes are the Eyre, Torrens, Frome, and Gairdner in South Australia, as well as Disappointment in the west. The northern coast is indented by the Gulf of Carpentaria; Tasmania is the principal island, lying off the coast of Victoria.

Industries: Agriculture, mainly grains, potatoes, sugar cane, grapes and fruits, sugar beets, corn; wine is produced, and wool, beef, skins and

hides, mutton and lamb, sugar, butter are among the principal exports. The chief manufactured products include munitions, copper bars, leather, tallow, chemicals, tin ingots. Numerous mines yield gold, silver, copper, lead, coal, iron ore, zinc, tin.

Interesting Features: Canberra University College and New England University College; primitive aboriginal tribes in the north; unusual animals including the koala, platypus, wombat, and dingo; the Federal Parliament House at Canberra.

History: Originally peopled by aboriginal tribes of Negro savages, Australia was explored by the Dutch navigators Hartog and Tasman during the first half of the 17th century, but was not colonized until 1788 when Great Britain established a penal settlement near Botany Bay. For many years the Australian colonies were penal institutions, and up to 1837 a large number of the inhabitants were convicts. Immigration greatly increased after the discovery of gold in 1851. A disastrous bank crisis in 1893 resulted in economic difficulties and scarcity of employment. In 1901 the states were organized as the Commonwealth of Australia, a new constitution was adopted and the first governor-general, Lord Hopetown, was appointed. The government declared war on Germany and Austria-Hungary in 1914; two years later the powerful Labor Party was replaced by the Australian National War government, which continued until the armistice in 1918. Numerous shipping and labor strikes during 1925-1927 created widespread disorder. Australia joined in the Second World War against the Axis. In 1942 the country was threatened by Japanese invasion. Australian soldiers fought heroically on many fronts in the war.

New Zealand

Population: Estimated 1,631,414.

Area: 113,315 square miles.

Capital: Wellington.

Leading Cities: Auckland, Wellington, Christchurch, Dunedin.

Geographic Features: Located in the South Pacific Ocean about 1,200 miles east of Australia, New Zealand comprises North Island (44,281 square miles), South Island (58,092 square miles), and numerous smaller islands. The highest peak is Mount Cook (12,349 feet) on South Island; Mount Ruapehu (9,175 feet) is an intermittently active volcano rising below Lake Taupo on North Island. The rivers are short and unimportant.

Industries: Mainly agriculture—dairying, sheep-raising, grains; tallow, wool, frozen meat, hides, butter, and cheese are exported. The principal minerals are gold and coal.

Interesting Features: The Sutherland Waterfalls with a drop of about 1,900 feet; compulsory military service for all males over 16; a general social insurance law; over 3,500 miles of railway.

History: Originally peopled by a Polynesian race known as the Maoris, New Zealand was explored by Captain James Cook in 1769-1777. The first permanent white settlement was made by the British at Wellington in 1840, and a constitutional government was established in 1852. After the discovery of gold in 1853, reckless land speculation resulted in a great depression which lasted from 1879 until 1895. New Zealand troops fought at Gallipoli and Palestine during the First World War. The government declared war on the Axis in the Second World War and its soldiers fought on many fronts.

Australian Territories

Papua, or British New Guinea, occupies the southeastern portion of the island of New Guinea north of Australia, and has an estimated total population of 340,644 and an area of 90,540 square miles. The principal exports include gold, rubber, copra, and

coconuts. The territory was acquired by Great Britain in 1884 and governed by Queensland until 1906. Papua was invaded in 1941 by Japanese troops who were expelled in 1942.

The Territory of New Guinea occupies the northeastern section of the island of New Guinea, including within its area (about 93,000 square miles) the Bismarck Archipelago and the Solomon Islands, with the islands of Buka and Bougainville. The total population is estimated at 673,270. The islands were the scene of many battles between U.S. and Australian forces against the Japanese during the Second World War. Also under the jurisdiction of Australia are Norfolk Island, Nauru Island, Territory of Ashmore and Cartier Islands, and the Australian Antarctic Territory.

Canada

Population: 11,506,655.

Area: 3,695,189 square miles.

Capital: Ottawa.

Leading Cities: Montreal, Toronto, Vancouver, Winnipeg, Hamilton, Ottawa, Quebec, Windsor, Edmonton, Calgary, London, Halifax, Verdun, Regina, Saint John, Victoria, Saskatoon, Three Rivers.

Provinces and Territories: Prince Edward, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, Yukon, Northwest Territories.

Geographic Features: Canada is bounded on the east by the Atlantic Ocean, Davis Strait, and Baffin Bay, on the north by the Arctic Ocean, on the west by Alaska and the Pacific Ocean, and on the south by the United States. The Rocky Mountains in the west contain numerous lofty peaks including Balfour (10,875 feet in altitude), Stephen (10,425 feet), and Victoria (11,500 feet). The Appalachian Mountains extend from the United States into New Brunswick and Nova Scotia, where the highest ridges are in

the Shickshock Mountains. Near the western coast is a chain of mountainous islands—Vancouver, Queen Charlotte, Prince of Wales, and others—extending from Juan de Fuca Strait almost to the boundary of Alaska. Largest among the rivers are the Mackenzie in the northwest, the Saskatchewan flowing into Lake Winnipeg in the southwest, the St. Lawrence in the southeast, the Churchill and the Nelson rivers flowing into Hudson Bay. The most important lakes include Great Bear and Great Slave in the northwest and Lake Winnipeg in Manitoba.

History: Canada was first explored by Jacques Cartier in 1535, and the first permanent settlement was made by Champlain at Quebec in 1608, the region being named New France. Acadia (Nova Scotia) was ceded to England by the French in 1713. The British took possession of the rest of Canada in 1763. The provinces of Upper (English-speaking) Canada and Lower (French-speaking) Canada were constituted in 1791, but were not united under a common government until 50 years later. The vast regions in the north that had been administered by the Hudson Bay Company were annexed under the name of Northwest Territories in 1869–70. At war with Germany and Austria-Hungary from 1914 until 1918, Canada again declared war on Germany in 1939, on Italy in 1940, and on Finland, Hungary, Japan, and Rumania in 1941, ending relations with Vichy France in 1942. Canada is peopled by English, French-Canadian, Scotch, Irish, and Hanoverian inhabitants, as well as by Eskimos in the extreme north.

Industries: Agriculture, mainly dairying, fruit, sheep-raising for wool, grains, potatoes, corn, roots, tobacco; commercial farms contain foxes, beavers, minks, muskrats, martens, raccoons, and fishers which are raised for

furs. Salmon, herring, lobsters, halibut, haddock, sardines, trout, pickerel, codfish, pilchards are marketed. The most important manufactured products include iron and steel, lumber, paper, textiles, chemicals; canneries are numerous. Among the principal minerals are gold, silver, nickel, lead, platinum, zinc, coal, petroleum, natural gas.

Interesting Features: Many national parks, of which the foremost are Jasper, Banff, and Waterton Lakes in Alberta; Yoho, Kootenay, Mount Revelstoke, and Glacier in British Columbia; Riding Mountain in Manitoba, and Prince Albert in Saskatchewan. Historic parks are Fort Beauséjour in New Brunswick and Fort Anne in Nova Scotia, while wild animal parks include Elk Island and Nemiskaan Park—both in Alberta. In Quebec are Dufferin Terrace—a famous boardwalk overlooking the St. Lawrence River, Battlefields Park where the Battle of the Plains of Abraham was fought in 1759, and ancient Notre Dame des Victoires Church (erected in 1688). Also of interest is a highway extending 4,190 miles from Halifax to Vancouver, the Alaska-Canada (Alcan) highway, built during the Second World War by the United States, Montreal University, Laval University in Quebec (largest university in Canada).

Newfoundland and Labrador

Newfoundland is an island in the North Atlantic Ocean, separated from eastern Canada by Cabot Strait, the Gulf of St. Lawrence, and the Strait of Belle Isle. The estimated population is 300,000; the area is 42,734 square miles. St. John's (the capital) and Harbor Grace are the leading cities, and the principal industry is fishing. Dried cod, cod liver oil, paper, and lumber are produced; the most important minerals include iron ore, copper, silver, and gold. Considered

the oldest British colony, Newfoundland was formally acquired by Great Britain in 1583.

Labrador is located in eastern Canada between Quebec and the Atlantic Ocean, and is separated from Newfoundland in the southeast by the Strait of Belle Isle. Much of the area, which covers 110,000 square miles, remains unexplored; the population is 4,716. Fishing is the main industry.

British West Indies and Other Dependencies

The largest island of the British West Indies, located south of Cuba in the Caribbean Sea, is Jamaica, which has an estimated population of 1,241,420 and an area of 4,450 square miles. The capital and chief city is Kingston. Among the major products are coffee, sugar cane, bananas, cocoa, ginger, cigars, rum, pimento, coconuts. Under the jurisdiction of Jamaica are the Turks and Caicos Islands and Cayman Island.

Bermuda comprises 360 coral islands located in the Atlantic Ocean about 580 miles east of North Carolina. The estimated population is 32,451, and the total area is 19 square miles; Hamilton is the capital and chief city. Onions, potatoes, lily bulbs, vegetables are produced.

The Bahama Islands comprise a large number of islands in the Atlantic Ocean east of south Florida and north of Cuba, Haiti, and the Dominican Republic. The population is estimated at 71,474, and the total area is 4,404 square miles. Nassau is the capital and chief city. Sponges, sisal, fruit, pearls, ambergris are produced.

Barbados, with an estimated population of 197,956 and an area of 166 square miles, is one of the largest of the Windward Islands and is located in the Atlantic Ocean about 200 miles northeast of Venezuela. The capital is Bridgetown. Among the chief products

are rum, molasses, cotton, sugar, tamarinds.

Leeward Islands, located in the Atlantic Ocean southeast of Puerto Rico, include the islands of Redonda, Antigua, St. Christopher, Nevis, Barbuda, Anguilla, Montserrat, Dominica, the British Virgin Islands, and Sombrero. The population is estimated at 97,644; the area is 727 square miles. St. John on Antigua is the chief town. Sugar, molasses, fruit, onions, tomatoes, coconuts, salt, tobacco, cigars are produced.

Trinidad is separated from the northeast coast of Venezuela by the Gulf of Paria, and has an estimated population of 506,316 and an area of 1,864 square miles. The capital is Port of Spain; the chief products include asphalt and oil. Northeast of Trinidad is the island of Tobago.

The Windward Islands, lying northeast of Venezuela, include the islands of Grenada, the Grenadines, St. Lucia, and St. Vincent. The total area is 821 square miles; the population is 262,006, and the capital is St. George's on Grenada. Cotton, arrowroot, rum, molasses, sugar, spices, fruit, cocoa, copra are produced.

British Honduras is located in Central America, and is bounded on the southeast by the Gulf of Honduras and on the west by Guatemala. The population is estimated as 61,068; the area is 8,598 square miles. Belize is the capital and chief city, and the major products include coffee, cacao, bananas, citrus fruit, chicle, mahogany.

British South American Colonies

British possessions in South America comprise British Guiana, the Falkland Islands, and South Georgia. **British Guiana** lies between Dutch Guiana in the east and Venezuela in the west;

the estimated population is 354,219, and the area is 89,480 square miles. Georgetown is the capital and chief city. The Kukenam Falls (2,000 feet) are generally considered the highest in the world. Gold, diamonds, bauxite, mica, and manganese are mined, and the exports include lumber, molasses, sugar, rum, rice, copra, charcoal.

The Falkland Islands, with a total area of 5,618 square miles, are located 300 miles east of the Strait of Magellan which divides the southern part of Chile. The population is estimated at 2,793, and the principal town is Port Stanley. Numerous sheep are raised for wool.

South Georgia, an island in the South Atlantic Ocean about 800 miles southeast of the Falkland Islands, is a whaling station with an estimated population of 360 and an area of 1,000 square miles.

British South Atlantic Islands

St. Helena is an island in the South Atlantic Ocean, 1,200 miles from the west coast of Africa, and has an estimated population of 4,710 and an area of 47 square miles. A useful naval coaling station, it produces fruit, flax, lace, timber; the capital is Jamestown.

Ascension is an island lying 700 miles northwest of St. Helena; the population is 169 and the area is 34 square miles.

Tristan de Cunha comprises a group of volcanic islands with a total area of 12 square miles, located in the South Atlantic Ocean halfway between the Cape of Good Hope and South America. The population is 165, and the chief products are fruit, potatoes, livestock, and fish.

Bulgaria

Population: 6,549,664.

Area: 42,808 square miles.

Capital: Sofia.

Leading Cities: Sofia, Plovdiv, Varna, Ruse, Burgas, Pleven, Stara Zagora, Khaskovo, Shumen, Yambol.

Geographical Features: Located in southeastern Europe, Bulgaria is bounded by Rumania and the Danube River on the north, on the east by the Black Sea, on the south by Turkey and Greece, and on the west by Yugoslavia. The Balkan Mountains extend through the middle of Bulgaria, rising to a height of almost 8,000 feet, while in the south the Rhodope Mountains reach a maximum altitude of 9,600 feet at the peak of Mussalla. Among the principal rivers are the Maritsa (crossing the south and northwest portions of the country), the Kamchiya which flows into the Black Sea, and several affluents of the Danube: the Isker, Yantra, Osma, and Yom.

Industries: Agriculture, mainly wheat, barley, oats, rye, potatoes, tobacco, corn, fruit, dairying, vineyards, livestock; manufacturing, mainly silk and attar of roses. The most important mineral is coal, but copper is also mined.

History: Peopled by Slavs (largely peasants), Bulgaria was established as a kingdom in 680 A.D. south of the Volga River in ancient Moesia, was conquered by the Byzantines in 1010, regained its independence in 1186 but was taken by the Turks (1388-93), and freed from the latter in 1878 after the war between Russia and Turkey. Eastern Rumelia became a part of Bulgaria the following year. During the First World War Bulgaria was an ally of Germany and Austria-Hungary, and was afterward forced to cede territory to Greece, Turkey, and Serbia. In the Second World War Bulgaria was an Axis satellite until 1944, when it surrendered to the Allies.

Canada

(See under British Commonwealth of Nations)

Chile

Population: 5,000,782.

Area: 296,717 square miles.

Capital: Santiago.

Leading Cities: Santiago, Valparaíso, Concepción, Antofagasta, Iquique, Talca, Chillan, Valdivia, Punta Arenas.

Geographical Features: Lying between the Andes Mountains and the Pacific Ocean, Chile is in western South America. Among the highest peaks are Mercedario (22,302), Lullailaco (22,146), Parinacota (20,950 feet), and Antofalla (20,900 feet). The rivers are short, including the Bueno and Cautin in the south and the Loa in the north. Largest of the lakes are San Martín, Buenos Aires, and Llanquihue in the south, while in the north is the Atacama Desert.

Industries: Agriculture, mainly dairying, barley, wheat, oats, lentils, beans, melons, peaches, apples, plums, nectarines, potatoes, peas, grapes for wine; sheep are raised for wool. The principal manufactured products are iron and lumber. Nitrates, copper, iron ore, iodine, silver, gold, lead, borax, coal, zinc, cobalt, manganese, salt, marble, sulphur, onyx are mined.

Interesting Features: Two universities and a National Library at Valparaíso; numerous stone figures on Easter Island (a Chilean national park); 6,000 miles of railroads; the University of Chile at Santiago; compulsory military service for all men from 20 to 45 years of age.

History: Chile was originally peopled by the Araucanian Indians who were conquered by Pedro de Valdivia in 1540. An audiencia, established in 1565, was dependent on the viceroyalty of Peru until 1778 when it became a separate division. Chile was

organized as an independent republic in 1818 after a revolution against Spain; a long period of military and political strife ensued. Numerous labor troubles arose following the inauguration (1930) of Arturo Alessandri. Chile severed relations with Germany, Italy, and Japan in 1942.

China

Population: Estimated 457,835,475.

Area: Including outlying territories, 4,314,097 square miles.

Capital: Chungking.

Leading Cities: Shanghai, Peiping, Tientsin, Kwangchow (Canton), Hankow, Nanking, Wenchow, Hangchow, Chengtu, Changsha, Chungking, Soochow (Wuhsien).

Territories: Mongolia, Sinkiang, Tibet, Manchuria.

Geographic Features: China occupies a vast area in southeast Asia, reaching its greatest elevation in the Himalaya Mountains of Tibet in the southwest, where the highest peaks are Everest (29,141 feet), K2 (28,250 feet) and Kangchenjunga (28,146 feet). Other important mountain ranges are the Khinghan, Khangai, and Tarabagatai in the north. Two deserts, the Gobi and Takla Makan, are located in the northwest. The principal rivers are the Yangtze Kiang in the southeast, the Wei Ho Hwang in the east central portion, the Hwang Ho in the northeast, as well as the Brahmaputra and Tarim in the west. The island of Hainan lies between the Gulf of Tonkin and the China Sea near Luichow Peninsula in the southeast. Among the largest of the numerous lakes are Poyang Hu, Hungtze Hu, and Tung Ting Hu in the east, and Koko Nor, Ulyungur Nor, and Bagrakh Kol in the north.

Industries: Agriculture, mainly barley, wheat, corn, kaoliang, millet, beans, peas, rice, indigo, sugar, fruit, cotton, hemp, tobacco, jute, flax, tea; cattle and pigs are raised, and pigs'

bristles are a major export. In the manufacturing centers are produced porcelain, lacquer-ware, paper, enamel, rugs and carpets, cement, glass, iron and steel; sugar refineries are located at Kwangchow, and ship-building and engineering works at Hankow and Shanghai. Silk has been an important industry for more than 4,000 years. The principal minerals include coal, iron ore, antimony, tin, molybdenum, salt, bismuth, wolfram, zinc, lead, mercury, copper, silver, petroleum.

Interesting Features: Outer Mongolia (a republic) is considered by Russia to be under Chinese sovereignty; in Tibet the religion is Lamaism (a form of Buddhism); the highest grade of musk is obtained from the increasingly scarce muskdeer; great areas of the region remain unexplored. Although many schools in the country were destroyed by the Japanese, 132 new institutions of higher learning were established in 1941-42.

History: The origin of the Chinese race is legendary and obscure; the first known dynasty was the Hsia, founded by Yao Shim and Yu in 2205 B.C. Confucius and Lao Tsu (expounder of Taoism) lived during the Chow dynasty which lasted from 1122 until 256 B.C., and from 618 to 907 A.D. China attained the height of its culture and power. The Mongol leader Kublai Khan was emperor from 1280 to 1368, when Hun Wu drove out the Mongols and established the famous Ming dynasty which was ended in 1644 by the Manchus. Hong Kong was ceded to Great Britain following a war (1839-42), and China was defeated by Japan in 1895. During the Boxer Rebellion in 1900, reactionaries were encouraged by Empress Tzu-Hsi to besiege the foreigners at Peking (now Peiping), and after American and European troops had been sent to the rescue, she was forced to pay an indemnity of \$320,000,000. China's

great national figure is Sun-Yat-Sen who propounded her principles of liberation. China entered the First World War on the side of the Allies in 1917, and in 1928 a Nationalist (Kuomintang) government was organized at Nanking by Chiang Kai-Shek. Japan captured Manchuria in 1931, establishing six years later a so-called independent government at Peiping. In 1937 Japan invaded China, although war was not officially declared until China's declaration against the Axis in 1941.

Colombia

Population: 9,523,300.

Area: 448,794 square miles.

Capital: Bogota.

Leading Cities: Bogota, Medellin, Barranquilla, Cali, Cartagena, Manizales, Bucaramanga.

Geographic Features: Located in northwest South America, Colombia reaches a maximum elevation at Tolima volcano (18,320 feet) in the Andes Mountains in the west. The principal rivers include the Cauca and Magdalena in the west, the Orinoco and Negro which form part of the eastern boundary, and the Putumayo separating Colombia from Peru in the south.

Industries: Agriculture, mainly coffee, bananas, tobacco, sugar, cotton, rice, cocoa, corn, rubber trees; manufacturing, mainly Panama hats and iron. Among the important minerals are emeralds, copper, mercury, gold, platinum, salt, silver, iron ore.

Interesting Features: The National University (founded in 1572) at Bogota; compulsory military service for all men from 21 to 30 years of age; radio stations at Bogota and Medellin.

History: The original inhabitants were Chibcha Indians, conquered by the Spaniards under de Quesada who founded Bogota in 1538. Known as New Granada, the country was a viceroyalty of Spain from 1740 until 1832,

when an independent republic (re-named Colombia in 1886) was established by Simon Bolivar. Colombia has been torn by numerous civil wars and boundary disputes. Colombia received from the United States an indemnity of \$25,000,000 for the loss of Panama in 1903. It participated in the Second World War against the Axis.

Costa Rica

Population: 705,305.

Area: Estimated 23,000 square miles.

Capital: San Jose.

Leading Cities: San Jose, Puerto Limon, Heredia.

Geographic Features: Located between Nicaragua and Panama in Central America, Costa Rica is traversed from northwest to southeast by mountains which rise to a maximum height of 11,200 feet (Irazu). The Pacific coast is indented by the gulfs of Murciélagos, Nicoya, and Dulce. Among the principal rivers are the San Juan—forming part of the northern boundary, the Chirripo in the northeast, and the Revantazon in the north central region.

Industries: Agriculture, mainly coffee, bananas, cocoa, tobacco, sugar cane, rice, potatoes; manufacturing, mainly the distillation of spirits. Cedar, rosewood, and mahogany are exported, and many horses, pigs, sheep, and goats are raised. The principal minerals include gold, silver, manganese, quartz, alabaster, granite, onyx, mercury, oil, copper, sulphur.

Interesting Features: Two international airports—one at Santa Anna, the other at Sabana; compulsory voting; the radio station at Paraiso, about 430 miles of railway.

History: Originally peopled by Indians, Costa Rica was visited in 1502 by Columbus, was colonized by Spaniards during the 16th century, and remained a Spanish possession until 1821. From 1823 to 1839 it formed part of the

Central American Federation. In 1917 a revolution led by Tinoco created trouble with the United States which did not end until the close of his presidential term in 1919, but internal conflicts have been infrequent. Costa Rica sided with the Allies in the Second World War.

Cuba

Population: 4,777,284.

Area: 44,164 square miles.

Capital: Havana.

Leading Cities: Havana, Camaguey, Santiago, Santa Clara, Cienfuegos, Matanzas, Pinar del Rio, Manzanillo.

Geographic Features: The largest island of the West Indies, Cuba lies about 90 miles south of Key West, Florida. The highest peak is Pico Turquino (8,320 feet) in the Sierra Maestra Mountains in the east; the rivers are short and unimportant, the principal one being the Cauto. The Isle of Pines is separated from the southwest coast by the Gulf of Batabano.

Industries: Agriculture, mainly sugar cane, coffee, cacao, tobacco, cereals, bananas, citrus fruits, potatoes; manufacturing, mainly cigars, cigarettes, iron and steel, lumber. Many cattle are raised, and cedar, mahogany, and other cabinet woods are exported. The minerals include iron ore, copper, gold, manganese, salt, petroleum, limestone, asphalt, clays.

Interesting Features: University of Havana (founded in 1721); compulsory military service; over 3,000 miles of railway; frequent tropical hurricanes; important air bases at Havana, Camaguey, and San Antonio de los Baños. Is a republic.

History: Originally peopled by Indians, Cuba was visited by Columbus in 1492, but actual settlement by the Spaniards did not begin until Diego de Velasquez landed at Baracoa in 1511. Havana was captured by the British in 1762 and restored to Spain

the following year. At war with Spain from 1868 to 1878 and again in 1895, Cuba was under United States military occupancy from 1898 (the close of the Spanish-American War) until 1902, when the republic of Cuba was organized. The island has since been torn by many civil wars and revolutions. In 1934 a treaty between the United States and Cuba was ratified, depriving the American government of any right to interfere in Cuban internal affairs. Cuba participated in the Second World War against the Axis.

Czechoslovakia

Population: 15,247,000.

Area: 54,244 square miles.

Capital: Prague.

Leading Cities: Prague, Brünn, Pilsen, Pressburg (Bratislava), Moravaska Ostrava (Mahrisch Ostrau), Olmutz (Olomouc).

Geographic Features: Located in central Europe, Czechoslovakia contains two great mountain ranges—the Carpathian in the east and the Sudeten on the German border in the west. Among the principal rivers are the March, which traverses the middle of the country; the Labe, Moldau, and Berounka in the west, and the Vah in the east. In the province of Moravia are many subterranean caverns, abysses, and lakes; the mineral springs and spas are well known.

Industries: Agriculture, mainly grains, potatoes, sugar beets, corn, hops, fruit. The most important manufactured products are beer, munitions, iron and steel, porcelain, textiles, paper, furniture, glass, toys, gloves, chemicals. Among the principal minerals are coal, iron ore, copper, lead, silver, gold, graphite, rock salt.

Interesting Features: The Czech University (founded in 1348) at Prague; numerous ruins of ancient castles; forests covering about 32 per cent of the country's area; the ice caves in Dobsina. Is a republic.

History: The republic of Czechoslovakia was created in 1918 from five possessions of Austria-Hungary: Bohemia, Moravia, Silesia, Slovakia, and Carpathian Ruthenia. Bohemia was originally peopled by the Boii, a Celtic race who were driven out by the Marcomanni after the beginning of the Christian era. The Czechs and Slovaks (of Slav origin) dominated the region from the sixth century until the tenth, when they were conquered by the Magyars, and remained under Austrian and Hungarian rule until after the First World War. In 1938 the Germans invaded western Czechoslovakia, and a large portion of the country was taken by Germany, Hungary, and Poland; the following year Hitler's forces seized Prague, organizing Bohemia and Moravia as a Protectorate of the Reich. Czechoslovakia was liberated by Russian and American forces in 1945. Ruthenia was ceded to the Soviet Union in 1945.

Denmark

Population: Estimated 3,805,000.

Area: 16,575 square miles.

Capital: Copenhagen.

Leading Cities: Copenhagen, Aarhus, Odense, Aalborg, Randers.

Geographic Features: Located in north central Europe, Denmark comprises a peninsula extending north of Germany between the Baltic Sea and the North Sea. The country is generally low-lying, the highest elevation being the Himmelbjerg in Jutland (560 feet). Long fjords penetrate far into the land, notably the Limfjord which crosses Jutland in the north, and Ringkjobing fjord in the west. The principal river is the Guden.

Industries: Agriculture, mainly grains, potatoes, beet-root, dairying, the raising of livestock; little manufacturing; butter, eggs, and bacon are exported, and fishing is a prominent industry.

Interesting Features: University of

Copenhagen (founded in 1479); Störstrom Bridge connecting the islands of Zealand and Falsberg; the historic castle of Kromborg at Elsinore (Helsingør). Is a constitutional monarchy.

History: Denmark was originally peopled by tribes known as the Cimbri, who menaced Rome at the end of the second century B.C., and were succeeded by a Gothic race called the Vikings. In 1018 King Sweyn conquered England, which remained under Danish rule until 1042. Wars with Sweden were frequent during the early history of Denmark; the latter was defeated by Germany in the Thirty Years' War, and in 1660 was made an absolute monarchy by Frederick III. Denmark became an ally of Napoleon in 1807, and after his downfall it lost Norway which had been a Danish possession since 1397. When a new constitution was adopted by Frederick VII in 1848-49, Schleswig revolted and was ceded to Prussia in 1864. Denmark was neutral during the First World War, but gained from it the return of North Schleswig. Germany assumed control of the Danish government in 1943. The country was liberated in 1945.

Danish Colonies

Greenland and the Faroe Islands

Greenland is an island northeast of the North American continent, separated from Baffin Island in the southwest by Baffin Bay and Davis Strait, and from Iceland in the southeast by Denmark Strait. The total area covers 736,518 square miles; the population is about 18,000. Godthaab is the capital and leading town. Fishing and furs comprise the principal industries, while cryolite and graphite are produced.

The Faroe Islands, located in the North Atlantic Ocean about 400 miles southeast of Iceland, have a total area of 540 square miles and a population

(1935) of 25,744. The leading town is Thorshavn.

Other Danish possessions include Suacelland, Fynn, and Laaland, off the east coast of the Danish mainland.

Dominican Republic

Population: 1,768,163.

Area: 19,332 square miles.

Capital: Ciudad Trujillo.

Leading Cities: Ciudad Trujillo, Santiago.

Geographic Features: The Dominican Republic occupies the eastern section of the island of Santo Domingo (Hispaniola), which lies east of Cuba between the Atlantic Ocean and the Caribbean Sea. The Cordillera Central Mountains extend east and west, the highest peak being Tina (9,420 feet). The principal rivers are the Great Yaqui in the north, and the Juan and Artibonite in the west. Samana Bay indents the northeast coastline, and the largest lake is Enriquillo.

Industries: Mainly agriculture—coffee, sugar, rice, tobacco, cotton, corn; cattle are raised. The forests yield mahogany, cedar, satinwood, and dyewoods. Among the minerals are silver, copper, iron, salt, platinum, coal, mercury, petroleum.

Interesting Features: University of Santo Domingo (founded in 1538), about 147 miles of railway, frequent tropical hurricanes.

History: The island was originally peopled by Indians, and the first white settlement was founded by Columbus in 1492. The colonists revolted many times against Spanish domination, but an independent republic was not permanently established until United States troops occupied the country in 1917. The government sided with the Allies in the Second World War.

Ecuador

Population: 3,085,871.

Area: 275,936 square miles.

Capital: Quito.

Leading Cities: Guayaquil, Quito, Cuenca.

Geographic Features: Located in the northwest part of South America, Ecuador is traversed from north to south by the Andes Mountains, the highest peaks being Chimborazo (21,424 feet) and Cotopaxi (19,550 feet). The principal rivers include the Napo in the northwest, and the Putumayo which forms a portion of the northern boundary. The Galapagos Islands, in the Pacific Ocean 600 miles west of Ecuador, are included in the country's area.

Industries: Agriculture, mainly cereals, fruit, potatoes, coffee, cocoa, tobacco, cotton, sugar, rice, balsa wood; manufacturing, mainly Panama (Jipijapa) hats. Among the minerals are silver, copper, gold, salt, iron, coal, lead, sulphur, petroleum.

Interesting Features: 763 miles of railway, compulsory military service, large areas of virgin forest.

History: Ecuador was originally peopled by Inca Indians, who were conquered in the 16th century by Pizarro and Bebalcazar. The country remained a Spanish possession until 1822, when it was liberated by a revolution, and was a part of Colombia from 1828 to 1832. After Ecuador was established as an independent republic, numerous civil wars ensued between two dominant political factions, the Conservatives and the Liberals, and its history has been one of strife and bloodshed. The government sided with the Allies in the Second World War.

Egypt

Population: 15,920,702.

Area: Estimated 383,000 square miles.

Capital: Cairo.

Leading Cities: Cairo, Alexandria, Port Said, Tanta, Asyut, El Fayum, Zagazig, Damanhur, El Mansurah, Suez, Beni Suef, El Minya.

Geographic Features: Located in

northeast Africa, Egypt is bounded on the east by the Red Sea and on the north by the Mediterranean. The Sinai Peninsula (150 miles in length) is included in the area of the country, but is separated from it by the Suez Canal. The Libyan Desert covers a large section of Egypt, and the sole river is the Nile which traverses the eastern region through a valley 960 miles in length.

Industries: Mainly agriculture—cotton, wheat, cereals, sugar cane, fruit, vegetables, beans, lentils; fishing is a prominent industry. Among the minerals are phosphate rock, petroleum, sulphate of magnesia, talc, building stones, gypsum, salt, gold, copper, alum, sulphur.

Interesting Features: The Gabel Awlia Dam, which is the longest in the world (16,400 feet); the Pyramids and the Sphinx of Gizeh; the colonnade of the Temple of Luxor—built about 1400 B.C.; the Colossi of Memnon near Thebes; the University of Al-Azhar (founded in about 968 A.D.) at Cairo.

History: The Egyptians in 5000 B.C. attained a higher stage of civilization than any other people except the inhabitants of lower Mesopotamia. During the first known dynasty—founded by Menes in 3400 B.C.—the Pyramids were built, and the country reached the height of its splendor from 1650 B.C. until four centuries later. In 332 B.C. Alexander the Great founded Alexandria, which flourished as the greatest city in the world under the Greek dynasty of the Ptolemies. Annexed to the Roman Empire in 30 B.C. by Augustus, Egypt became part of the Byzantine Empire in 395 A.D. and was conquered in 639 by the Arabs. In 1250 the government was seized by the tyrannical Mamelukes who were subdued in 1517 by Selim I, an Ottoman sultan. From the 8th century to the 19th, Egypt was an autonomous state of Arabia. The most powerful Egyptian ruler until 1800 was Ali Bey,

succeeded by Mohammed Ali; the latter massacred the Mamelukes in 1811 and revolted against the sultan (1831–39). In 1875 the extravagant monarch Ismael Pasha sold his shares of the Suez Canal to England, and the British and French governments formed a dual control over his economic policies. Egypt was a protectorate of England from 1881 until 1922; seven years later Sudky Pasha organized a dictatorship, and a new constitution was adopted in 1930. Egypt ended relations with the Axis powers during the Second World War.

England

(See GREAT BRITAIN under British Commonwealth of Nations)

Estonia

Population: Estimated 1,134,000.

Area: 18,353 square miles.

Capital: Tallinn.

Leading Cities: Tallinn, Tartu (Dorpat), Narva.

Geographic Features: Located in northern Europe below the Gulf of Finland, Estonia comprises a low plain with hills from north to south. The southwest coast is indented by Parnu Gulf, and the principal rivers are Gauja in the south and Ema in the east. Off the west coast above the Gulf of Riga lie islands of Hiiumäe (Dago), Saare (Ezel), Vormsi, and Muhu. The principal lakes are Peipus and Võrtsjärv.

Industries: Chiefly agriculture—grains, corn, potatoes, dairying, livestock; among the exports are paper, lumber, meat, cellulose. Oil shale deposits occupy an area of 2,000 square miles.

Interesting Features: University of Tartu (founded in 1632); a historic fortress built at Narva in 1492 by Ivan III of Russia; about 1,350 miles of state-owned railway.

History: Estonia was originally inhabited by warlike tribes. In 1219 the

northern part of the country was conquered by Denmark and sold in 1346 to German crusaders who had occupied the southern region. Ruled by Germany for nearly 600 years, Estonia voluntarily became a Swedish possession in 1521, but was ceded to Peter the Great of Russia in 1721 and remained under Russian domination until 1918 when an independent republic was established. In 1940 the Estonians were admitted into the Union of Socialist Soviet Republics.

Ethiopia

Population: Estimated 12,100,000.

Area: 350,000 square miles.

Capital: Addis Ababa.

Leading Cities: Addis Ababa, Harar, Diredawa.

Geographic Features: Located in northeast Africa, Ethiopia is mountainous and volcanic; the highest peaks are Ras Dashan (15,150 feet) and Ala Goz (14,277 feet). The principal rivers are the Akoba—forming part of the western boundary, the Blue Nile in the west, and the Uebi Scebeli in the east. Lake Tana (1,000 square miles in area) lies in the northwest.

Industries: Agriculture, mainly cotton, sugar cane, coffee, tobacco, fruit, rubber trees, grains; horses, cattle, sheep, and goats are raised. Spears, knives, and hatchets are manufactured from iron. The minerals found include copper, gold, sulphur, coal, potash salts, silver.

Interesting Features: The Franco-Ethiopian railroad (487 miles long) which connects Addis Ababa and Jibuti; Moslem religious institutions at Harar; a territorial army of about 39 battalions.

History: Originally peopled by independent tribes speaking a Semitic language, Ethiopia reached the height of its power in the 6th century, but Europe knew little of the country until after the expedition of James Bruce in 1769. Italy claimed a protectorate over

Ethiopia in 1889, but Menelik II defeated the Italian forces in 1896 at Adua. In 1906 Great Britain, France, and Italy recognized the independence of Ethiopia, which was admitted to the League of Nations in 1923; it was conquered by Italy in 1935 and liberated by British troops six years later. The government declared war against the Axis in the Second World War.

Finland

Population: 3,387,217.

Area: 134,588 square miles.

Capital: Helsinki.

Leading Cities: Helsinki, Viipuri (Viborg), Turku (Abo), Tampere, Vaasa.

Geographic Features: Located above the Gulf of Finland in northern Europe, the country consists of a rugged plateau with numerous lakes including Inari in the north. The Vuoksi River flows into Lake Ladoga (in the south-east), which has an area of 7,000 square miles; other rivers include the Teno—forming part of the boundary between Finland and Norway, the Oulu in the west central region, and the Kemi in the north. Off the south-west coast between the Gulf of Bothnia and the Baltic Sea lie the Ahvenanmaa (Åland) Islands.

Industries: Agriculture, mainly grains, potatoes; manufacturing, mainly paper and pulp, lumber, iron and steel, textiles, leather, chemicals, cotton goods, rubber. Fishing is an important industry, and furs are exported.

Interesting Features: Three universities—one at Helsinki and two at Turku; compulsory military service; the ancient Turku Cathedral; about 3,377 miles of railway.

History: Finland was originally peopled by the Lapps, who were driven out in the 8th century by Finns coming from territories south of the Baltic Sea. Sweden conquered and Christianized the country in the 12th

century, organizing it as a grand duchy four centuries later. Russia acquired the province of Viborg in the 17th century, and the remainder of Finland in 1809. The Finns became independent in 1917, organizing a republic two years afterward, but in 1939 were forced to surrender 16,173 square miles of territory to the Union of Soviet Socialist Republics. In 1941 Finland joined Germany in her war against the Soviet Union. An armistice with the U.S.S.R. and Great Britain was declared in 1944.

France

Population: Estimated 38,000,000.

Area: 212,659 square miles.

Capital: Paris.

Leading Cities: Paris, Marseille, Lyons, Bordeaux, Nice, Toulouse, Lille, Nantes, Strasbourg, St. Etienne, Le Havre, Rouen, Reims, Roubaix, Clermont-Ferrand, Rennes, Boulogne-sur-Seine, Dijon, Limoges.

Geographic Features: Located in western Europe, the country is separated from Germany in the east by the Rhine, and from Italy in the southeast by the Maritime Alps which rise to an altitude of 15,781 feet at Mont Blanc. Other important mountain ranges are the Pyrenees, forming the boundary between France and Spain in the south, the Vosges, the Jura in the east bordering Switzerland, the Auvergne and the Cevennes in the southern region. The north is drained by the Seine River, the east and south by the Rhone, and the west by the Garonne and Loire. There are few lakes, the largest being Grand-Lieu (27 square miles in area) in the department of Loire-Inférieur, and Saint Point in the Jura Mountains. The island of Corsica in the Mediterranean Sea is considered a part of France.

Industries: Agriculture, mainly grains, mixed corn, beets, fruit, potatoes; manufacturing, mainly chemicals, silk, textiles, perfumes, iron, soap,

porcelain. Wine and the famous Beauvais tapestries are exported. The principal minerals include coal, iron ore, lignite, asphalt, lead, rock salt, potash salts, bauxite, mineral oils.

Interesting Features: University of Paris (founded about 1150-70); the historic palace and gardens at Versailles; the Louvre Museum, Eiffel Tower and Le Bourget Airport in Paris; ancient cathedrals at Reims, Amiens, Beauvais, Paris, Chartres and other cities; the caves of Monestian at Ariège; Argonne Forest, site of a great battle in the First World War; historic fortified walls at Carcassonne.

History: Originally peopled by Celtic tribes, France was known in ancient times as Gaul and was conquered by Julius Caesar in 58-51 B.C., remaining under Roman domination until the 5th century when King Clovis of the Franks consolidated the country as a monarchy. After the reign of Charlemagne—one of the most powerful rulers in history—the empire was divided into states governed by feudal noblemen, and the power of the king decreased; but under the Capetian dynasty royal authority was restored. William of Normandy defeated the English in 1066, and in 1154 all of the western half of France was united with England, but was again under French rule by the end of 1271. In the years following 1328, English forces occupied a large part of France but were driven out in 1428. Religious wars between the Huguenots (Protestants) and the Catholics were fought from 1560 until 1598, when Henry IV granted toleration to Protestantism. As a consequence of the Seven Years' War with England, France lost Canada and Louisiana; the latter was recovered in 1803 and sold to the United States. In 1789 the Bourbon king and queen were beheaded in the Revolution, and four years later France became a republic. Napoleon Bonaparte became emperor in 1804; after his

downfall in 1814-15 the Bourbons were again in power until 1830 when Louis Philippe of the House of Orleans was made king. The second republic was organized in 1848, but Louis Napoleon established the second empire four years afterward; and the third republic was set up after the war with Prussia (1870-71). In 1914 France was invaded by Germany and became the main battleground of the war, suffering great loss of life and property. The inflation of the franc in 1926 created a great financial disaster, and the French suffered severe economic difficulties. Invaded again by the Germans in 1940, France was liberated in 1944 by Allied forces.

French Colonies

Algeria and Tunisia

Located in northern Africa, Algeria lies between the Mediterranean Sea on the north and French West Africa on the south, and is bounded on the east by Tunisia and Libya. The area is 847,552 square miles, and the population in 1936 was 7,234,684. Algiers (the capital) and Constantine are the leading cities. Grains, corn, potatoes, tobacco, olive oil, wine, fruit are produced; many cattle are raised, and copper, lead, iron ore, mercury, zinc are mined.

Tunisia lies on the Mediterranean coast of northern Africa, northwest of Libya and east of Algeria, and covers an area of 48,313 square miles. The population in 1936 was 2,608,313. Tunis is the capital and leading city, and the chief products include grains, olives, dates, almonds, cork, henna; the principal minerals are zinc, iron ore, lead and phosphate. Arabs and Bedouins comprise the native population.

French West Africa and French Equatorial Africa

French West Africa comprises the colonies of Senegal, Mauritania, Ivory

Coast, French Guinea, Dahomey, French Sudan, and Niger. The total area covers 1,818,698 square miles; the population in 1937 was 14,944,830. Dakar is the capital and chief city. The major products include fruit, palm oil, cotton, rubber, peanuts, cacao.

French Equatorial Africa lies north of Belgian Congo and south of Libya, and comprises the colonies of Gabon, Ubangi-Shari, Chad, and Middle Congo. The total area is 959,256 square miles; the population in 1931 was 3,423,015. Brazzaville is the capital and chief city, and the major products are ivory, palm oil and wild rubber.

Cameroons, Togoland, and French Somaliland

Cameroons is bounded on the east by French Equatorial Africa, and on the southwest by the Gulf of Guinea. The area is 166,489 square miles; the population in 1938 was 2,516,623. Yaounde is the capital and leading city, and the major products include palm oil, hides, almonds, ivory, cacao.

Togoland is a mandated territory under the jurisdiction of French Dahomey, lying east of the Gold Coast and south of French Sudan. The area belonging to France covers 21,893 square miles, and has a population of 780,497.

French Somaliland is located in eastern Africa, bounded on the west and south by Ethiopia and separated from the Arabian peninsula by the Strait of Bab el Mandeb. The area covers 8,492 square miles; the population in 1936 was 44,240. Djibouti is the capital and chief city, and the principal exports include ivory, coffee, and hides.

Madagascar and Reunion Islands

Madagascar comprises an island separated from the southeastern coast of Africa by Mozambique Channel, and covers an area of 241,094 square

miles. The population, including the Mayotte and Comoro Islands, was 3,797,936 in 1936. Tananarive is the capital and chief city, and the major products include rice, vanilla, tobacco, cacao, sugar cane, cabinet wood, resins, beeswax, cloves; many cattle are raised. The principal minerals are gold, radium, mica, graphite, phosphates.

Reunion is an island in the Indian Ocean about 420 miles east of Madagascar, covering an area of 970 square miles and having a population of 208,858. Coffee, sugar, rum, vanilla, spices, tapioca are produced.

French Indo-China and French India

French Indo-China is located in southeastern Asia and is bounded on the east by the China Sea, on the north by China, and on the west by Burma and Thailand. The colony includes Cochin-China, Cambodia, Annam, Tonkin, Kwangchow, and Laos; the total area is 281,174 square miles, and the population is 24,461,251. Hanoi is the capital and chief city. Among the principal exports are rice, pepper, hides, corn, zinc, rubber, fish, tin.

The French colonies in India are located on the southeast coast on the Bay of Bengal, and comprise Pondicherry, Karikai, Chandernagor, Yanaon, and Mahe. The total area covers 196 square miles, the population is 323,500 and the capital is Pondicherry. French India is primarily agricultural, the chief export being oil seed.

French Colonies in the West Indies

The French colonies in the West Indies are Guadeloupe and Martinique. Guadeloupe lies about 400 miles northeast of Venezuela, and comprises the two islands of Basse-Terre and Grande Terre as well as five smaller islands. The total area covers 583 square miles; the population in 1936 was 304,209. Basse-Terre is the cap-

ital and chief town, and the major exports include coffee, rum, sugar, vanilla, bananas, cacao.

Martinique is an island located about 100 miles southeast of Guadeloupe, and is separated from the British island of St. Lucia on the south by St. Lucia Channel. The area is 385 square miles; the population is 246,712. Fort-de-France is the capital and chief city. Martinique contains Mt. Pelee, a volcano which destroyed the 40,000 inhabitants of St. Pierre in 1902. The major exports are rum, sugar, bananas, pineapples, cacao beans. In 1943 the United States ended diplomatic relations with Martinique and Guadeloupe.

French Guiana and St. Pierre and Miquelon

French Guiana is located on the northern coast of South America, and is bounded on the west by Dutch Guiana (Surinam) and on the east and south by Brazil. The population, including that of Innini which was separated territorially from French Guiana in 1930, was 30,906 in 1936; the areas of French Guiana and Innini are 34,740 square miles and 30,301 square miles respectively. The capital and chief city is Cayenne; Devil's Island, a noted penal colony, lies near the coast. Among the major exports are bananas, cacao, gold, fish, glue, rum, hides, lumber.

St. Pierre and Miquelon are two groups of islands near the southwest coast of Newfoundland in the North Atlantic Ocean. The total area covers 93 square miles; the population is 3,916. Separate townships were abolished in 1935. The principal industry is fishing; dried and fresh cod are exported.

French Colonies in the Pacific Ocean

The French colonies in the South Pacific Ocean consist of widely scattered islands, including Tahiti in the

Society Islands, the Marquesas, the Leeward Islands, the Tuamotu group, the Gambier, the Tubuai and Rapa islands. The islands administered by Tahiti cover a total area of 1,520 square miles and have a population of 39,920. Tahiti produces sugar, rum, bananas, vanilla, coconuts, fruit.

New Caledonia is an island in the South Pacific Ocean about 800 miles east of Australia, with an area of 8,548 square miles and a population of 53,245. The dependencies of New Caledonia are the Wallis Archipelago, the Isle of Pines, the Loyalty Islands, Fortuna, the Huon Islands and Alofi. Noumea is the capital and chief town. The major industry is mining; cobalt, iron, nickel, manganese, mercury, chrome, gold, silver, copper, lead, and other minerals are produced. Coffee, cotton, tobacco, bananas, corn, pineapples are among the agricultural products.

The New Hebrides is a group of islands about 250 miles northeast of New Caledonia, with a total area of 5,700 square miles and a native population estimated as 60,000. Vila is the capital and chief city. The major products include cotton, coffee, cacao, and copra.

Germany

Population: About 60,000,000.

Area: 180,985 square miles.

Capital: Berlin.

Leading Cities: Berlin, Hamburg, Cologne, Munich, Leipzig, Essen, Dresden, Frankfurt, Düsseldorf, Duisburg, Hanover, Stuttgart, Nürnberg, Chemnitz, Bremen, Bochum, Magdeburg, Mannheim.

Geographic Features: Germany is the largest country in central Europe. It is generally flat in the north but mountainous in the southern region, where the loftiest peak is the Gross Glockner (12,247 feet). The principal mountain range is the Bavarian Alps. Among the most important rivers are

the Rhine in the west and the Elbe and Oder in the north. There are no lakes of great size, the largest being Bodensee on the Swiss border, Die Murtitz in the state of Mecklenburg, and Mauer See in Prussia.

Industries: Agriculture, mainly wheat, rye, and other grains, potatoes, sugar beets, tobacco, fruit, walnuts; the numerous vineyards provide wine. Before 1945 the chief manufactured products were iron and steel, chemicals, textiles, beet-root sugar, glass, porcelain, earthenware, clocks, beer, woolen and cotton goods. Coal, iron ore, lignite, lead, zinc, copper, potash, salt, petroleum were mined.

Interesting Features: Numerous historic castles including the Castle of Neuschwanstein in Bavaria; the famed Black Forest; the Academy of Arts at Munich; the picture galleries at Dresden.

History: Germany was originally peopled by barbarian tribes who were conquered by King Clovis of the Franks in the 5th century. Charlemagne brought the greater part of the region under his control by defeating the Saxons, but in 843 it was divided into territories by the three sons of Louis I. Germany became the Holy Roman Empire in 962 when Otto I was crowned Holy Roman Emperor by the Pope. During the ensuing centuries the country split up into hundreds of feudal states with no effective central government. A religious revolution instigated in 1517 by Martin Luther resulted in numerous conflicts between the Catholics and Protestants. The emperor was defeated in the Thirty Years' War with France, Sweden, England, and Denmark—a triumph for the petty noblemen—and in 1438 the Austrian dynasty of the Hapsburgs rose to power. The Hohenzollern dynasty ruled from 1701 to 1918. The Napoleonic wars resulted in the dissolution of the Holy Roman Empire, and the German Confederation

was established with Austria and Prussia as the dominant powers, but was dissolved in 1866. After the Franco-Prussian War (1870-71) a new empire was organized under Emperor William I and Bismarck; the latter was forced out of office by William II in 1890. Attempting to conquer Europe in the First World War (1914-18), Germany was defeated by the Allies. A republic was proclaimed at Weimar. Inflation and grave financial difficulties disorganized the country, and the National Socialists (Nazis) led by Adolf Hitler established a dictatorship in 1933. In 1938 Hitler annexed Austria and Czechoslovakia. In 1939 his armies invaded Poland, precipitating the Second World War. In May 1945, Germany surrendered unconditionally to the Allies.

Great Britain

(See under British Commonwealth of Nations)

Greece

Population: Estimated in 1939 as 7,108,814.

Area: 50,257 square miles.

Capital: Athens.

Leading Cities: Athens, Piraeus, Thessalonike (Salonika), Patras, Volos, Corfu.

Geographic Features: Located on the Balkan Peninsula in southwestern Europe, Greece extends into the Mediterranean Sea and is traversed by the Pindus Mountains; the highest peak is Mount Olympus (9,730 feet). Among the principal rivers are the Nestos and Alkramon in the north, and the largest lake is Akkinou above the Gulf of Rendina. The area of Greece includes many islands near the coast—Crete, Euboea, Mytilene (Lesbos), Lemnos, and Cephalonia are the most important.

Industries: Agriculture, mainly grains, corn, tobacco, lemons, olives, fruit, rice, nuts; little manufacturing is

done. Zinc, iron, lignite, and salt are mined.

Interesting Features: Two universities in Athens; the Parthenon of the Acropolis and other remnants of ancient Greek civilization; 20 monasteries of the Greek Orthodox Church on Mount Athos.

History: The earliest inhabitants of Greece were the Mycenaeans, who occupied the country before 1000 B.C. Greek art, literature, and philosophy attained their highest development from 500 to 300 B.C., declining after the Roman conquest. Greece was under Turkish domination from 1456 until 1829, when it became an independent kingdom. The provisional government under Venizelos declared war on Germany and Bulgaria in 1916, and after the armistice received large grants of territory. Conquered by German and Italian forces in 1941, Greece was liberated in 1944 by the Allies.

Guatemala

Population: 3,284,269.

Area: 45,452 square miles.

Capital: Guatemala City.

Leading Cities: Guatemala City, Quezaltenango, Coban, Zacapa.

Geographic Features: Located in Central America between Mexico on the north and Salvador and Honduras on the southeast, Guatemala is traversed along the Pacific coast by volcanic mountains; the highest summits are Tajumulco (13,800 feet) and Tacana (13,300 feet). Among the principal rivers are the Matagua in the south, and the Usumacinta which forms part of the boundary between Guatemala and Mexico.

Industries: Agriculture, mainly bananas, beans, corn, sugar, wheat, chicle gum, coffee, potatoes; there is little manufacturing. Gold, silver, iron, copper, lead, tin, alabaster are among the important minerals, and the forests yield valuable dyewoods and mahogany.

Interesting Features: The University of Guatemala at Guatemala City; the famous Mayan ruins in Uaxactun and Quirigua; about 800 miles of railway. Is a republic.

History: Originally peopled by Mayan Indians, the country was colonized by Spaniards under Pedro de Alvarado in the 16th century, and remained under the rule of Spain until 1821. Guatemala was a part of Iturbide's Mexican Federation from 1823 until 1839, when the Federation was broken up by a revolt instigated by Rafael Carrera. Revolts and internal conflicts have marked the history of Guatemala. The government declared war on the Axis powers during the Second World War.

Haiti

Population: Estimated 3,000,000.

Area: 10,204 square miles.

Capital: Port-au-Prince.

Leading Cities: Port-au-Prince, Cap Haitien.

Geographic Features: Occupying the western third of the island of Santo Domingo (Hispaniola), Haiti lies between the Atlantic Ocean in the north and the Caribbean Sea in the south, and is separated from Cuba by Windward Channel. In the southern region are the La Hotte and Mexico mountains, while Mont Noir rises in the central part where the Artibonite River traverses Haiti. Two islands belonging to the country are Gonava in the Gulf of Gonaives, and Tortue (Tortuga) off the northern coast.

Industries: Mainly agriculture—coffee, sisal, cotton, sugar, tobacco, fruit, cashew nuts, cattle-raising; the minerals include gold, iron, and copper, but little mining is done.

Interesting Features: The majority of the natives are Negroes who speak a dialect called French Creole; and voodooism is still practiced. Is a republic.

History: Originally peopled by Indi-

ans, Haiti was visited by Columbus in 1492 and established as a French colony in 1677, becoming independent in 1804 after a revolt led by Toussaint L'Ouverture. Many internal conflicts ensued, and in 1915 the country was occupied by United States Marines to restore order. President Hoover granted Haiti practical autonomy in 1929. The government declared war on the Axis in the Second World War.

Holland

(See The Netherlands)

Honduras

Population: 1,105,504.

Area: 44,275 square miles.

Capital: Tegucigalpa.

Leading Cities: Tegucigalpa, San Pedro Sula.

Geographic Features: Located in Central America, Honduras reaches its highest elevations in the Cordillera Dipilito mountain range (over 9,200 feet) in the southeast. The principal rivers are the Segovia—forming part of the boundary between Honduras and Nicaragua, the Ulua and Chamelecon in the west, and the Patuca in the east. Lake Yojoa in the west has an area of 200 square miles, while Caratasca Lagoon in the northeast contains numerous islands.

Industries: Mainly agriculture—coffee, tobacco, bananas, corn, rice, coconuts, oranges, lemons; many cattle are raised. The minerals include gold, silver, iron, copper, zinc, lead, coal, and antimony, but little mining is done.

Interesting Features: Ancient Mayan ruins in the northwest; the University at Tegucigalpa; compulsory military service for men from 21 to 40 years of age.

History: Originally peopled by Mayan Indians, Honduras was visited in 1502 by Columbus, and the first white settlements were made by the Spanish explorers Cristobal de Olid

and Hernando Cortez. The country was part of the captaincy general of Guatemala from 1539 until 1821, and a member of the Central American Federation from 1823 to 1839 when Honduras became an independent republic. Numerous revolutions and civil wars have since occurred. The government declared war on the Axis in the Second World War.

Hungary

Population: Estimated 14,733,000.

Area: 66,409 square miles.

Capital: Budapest.

Leading Cities: Budapest, Szeged, Debrecen, Kecskemet, Pecs (Funf-kirchen), Miskolc, Hodmezovasarhely.

Geographic Features: Located in southern Europe between Czechoslovakia in the north and Yugoslavia in the south, Hungary is traversed from southwest to northeast by several mountain ranges—the highest of which are Vertes (1,575 feet) and Pilis (2,476 feet). The principal rivers are the Danube in the west, the Drava forming part of the southwestern boundary, and the Tisza in the east. Balaton Lake lies southwest of Budapest.

Industries: Mainly agriculture—grains, corn, sugar beets, potatoes, grapes, cattle-raising; wine-making is a prominent industry. Iron, steel, and sugar are manufactured. The most important minerals include bauxite, coal, lignite, oil.

Interesting Features: In Budapest, the Houses of Parliament, the Agricultural Museum in City Park, Coronation Church (erected in the 13th century) on Castle Hill.

History: Hungary was originally peopled by the Romans, who were later supplanted by Germanic tribes and the Huns. The barbarous Magyars conquered the country in the 9th century, terrorizing all Europe until their defeat by the Germans in 933. The Magyar ruler Stephen I was given the title

of king by the Pope in 1001. During the reign of Matthias Corvinus (1458–90) Hungary attained great prosperity, but was annexed to Austria by Ferdinand II in 1526, remaining under Austrian domination—in spite of numerous revolts—until 1918 when an independent republican government was established. Hungary became a monarchy again in 1920. It joined Germany in its war on the Allies, but was itself occupied by the Germans in 1944. It surrendered to the Allies in 1945.

Iceland

Population: 121,618.

Area: 39,709 square miles.

Capital: Reykjavik.

Leading Cities: Reykjavik, Akureyri.

Geographic Features: Iceland is an island in the North Atlantic Ocean, separated from the southeast coast of Greenland by Denmark Strait, and largely covered with huge glaciers and volcanic peaks. The highest mountains are Orafa Jokull (6,241 feet) and Hecla (5,110 feet) in the south. Two large gulfs—Breibi fjordhur and Huna floi—indent the coastline; numerous geysers and boiling springs are in the west.

Industries: Agriculture, mainly potatoes, hay, turnips; many sheep and cattle are raised. Fishing for herring and cod is a prominent industry. Lignite, Iceland spar, and sulphur are the only minerals on the island.

Interesting Features: The University at Reykjavik; hot water from volcanic springs providing heat for buildings and homes; no railroads but about 800 miles of carriage roads.

History: Iceland was uninhabited until a temporary colony was established before the 9th century by Irish monks. In 874 heathen Norsemen, with Scotch and Irish immigrants, made independent settlements on the island; and in 930 a general assembly

(the Althing) was organized at Thingvellir. Conquered by Norwegian kings in 1261, Iceland remained under their domination until 1380 when it became a Danish possession. During the 16th and 17th centuries it was the prey of numerous pirates; the Althing was abolished in 1798 but restored in 1843. Home rule was granted to Iceland in 1874, but full independence was not obtained until 1940. Iceland became a republic in 1944.

India

(See under British Commonwealth of Nations)

Iran (Persia)

Population: Estimated 15,055,115.

Area: 628,060 square miles.

Capital: Teheran.

Leading Cities: Teheran, Tabriz, Isfahan, Meshed, Resht.

Geographic Features: Located in southwestern Asia below the Caspian Sea, Iran is separated from Arabia in the south by the Persian Gulf and the Gulf of Oman. The highest peak is Mount Demavend (18,549 feet) in the Elburz Mountains. Among the principal rivers are the Quizil Uzun and Karun in the west, and the Atrek and Shur in the east. In the north central region lies the Dasht-i-Kavir Desert.

Industries: Agriculture, mainly grains, fruit, tobacco, cotton, rice, opium, gums, wine-making; manufacturing, mainly carpets. Hides and wool are important products. Turquoise, iron, petroleum, copper, lead, coal, marble, nickel, and cobalt are mined.

Interesting Features: The richest single oil field in the world; compulsory military service; about 4,000 miles of good motor roads.

History: The earliest inhabitants of the kingdom of Iran, which was established by Cyrus in 550 B.C., were related to the Aryans of India and the

Medes. Iran was conquered by Alexander the Great in 334-331 B.C., and by the Saracens (642 A.D.) who made Mohammedanism the dominant religion. Invaded by Mongols in the 13th and 14th centuries, the country attained remarkable prosperity during the reign of Abbas the Great (1586-1628). Aga Mohammed founded a dynasty which ruled from 1794 to 1925. In the latter year Riza Khan Pahlevi, a commoner, seized power and was named shah. He was succeeded by his son in 1944, after Russian and British occupation of the country. Iran sided with the Allies in the First and Second World Wars.

Iraq (Mesopotamia)

Population: Estimated 5,000,000.

Area: 140,000 square miles.

Capital: Bagdad.

Leading Cities: Bagdad, Mosul, Basra, Karbala.

Geographic Features: Located below Turkey in southwestern Asia, Iraq comprises part of the Arabian peninsula and is bounded on the east by Iran. In the west lies the El Hamad Desert, while the Jawur Mountains rise in the northeast. The principal rivers are the Tigris and Euphrates, which traverse the central part of the country.

Industries: Mainly agriculture—grains, rice, cotton, tobacco, dates, sheep-raising for wool and hides. Large amounts of oil are produced.

Interesting Features: The Tigris-Euphrates Valley, considered by some Biblical authorities to have been the Garden of Eden; the city of Ur, oldest in the world, built 6000 years ago; the ruins of Babylon below Bagdad.

History: Originally peopled by the Babylonians, Chaldeans, and Assyrians, Iraq was conquered by the Egyptians in 1700 B.C., by Alexander the Great in 331 B.C., by the Romans in 165 A.D., and by the Arabs in the 8th century. The Mongol invasion in 1298

caused great damage and havoc, ruining the ancient irrigation systems. Iraq remained under Arab domination until after the First World War, when it became an independent kingdom under the rule of Emir Feisal. The government declared war against the Axis in the Second World War.

Ireland (Eire)

(See under British Commonwealth of Nations)

Italy

Population: 45,801,000.

Area: 119,800 square miles.

Capital: Rome.

Leading Cities: Rome, Milan, Naples, Genoa, Turin, Palermo, Florence, Bologna, Venice, Messina, Verona, Padua, Brescia, Reggio di Calabria, Ferrara, La Spezia.

Geographic Features: Comprising a peninsula in southern Europe, Italy lies between the Adriatic Sea on the east and the Tyrrhenian and Ligurian seas on the west, and extends northward to Switzerland and Germany. The principal mountain ranges are in the Alps along the northern boundary, the highest peak being Mont Blanc (15,732 feet) on the border between France and Italy. Mount Vesuvius, a famous volcano, rises near Naples. Sardinia, Sicily, Elba, and other islands off the west coast are Italian possessions. The most important rivers are the Po, Adige, and Arno in the north, and the Tiber in the west central region. Maggiore, Como, and Garda are the largest lakes, and the southern coastline is indented by the Gulf of Taranto.

Industries: Agriculture, mainly grains, rice, sugar beets, potatoes, corn, grapes, olives, dairying, sheep-raising for wool, wine-making. The chief manufactured products include silk and cotton goods, chemicals, sugar, and macaroni. Sulphur, iron, mercury,

zinc, lead, antimony, bauxite, and manganese are mined.

Interesting Features: St. Peter's Church (largest church in the world) at Rome; the Vatican, residence of the Pope; the leaning tower of Pisa; the ancient Roman Coliseum and Arch of Titus; 26 universities; numerous art museums.

History: Italy was originally peopled by Latin, Oscan, Umbrian, Sabellian, and other tribes; the southern region—known as Magna Graecia—contained Greek colonies. Northern Italy (Cisalpine Gaul) was conquered by the Romans in 225–222 B.C., and remained a part of Rome until 476 A.D. The entire peninsula was ruled by the Byzantines from 536 to 553, and the Lombards established their Italian realm in 568, but were defeated by King Charles of the Franks. The German emperor Otto the Great extended his rule over northern and central Italy in 961. All the Italian cities later became separate republics, the most powerful of which (in the 12th century) were Venice, Genoa, and Pisa. In the 13th century Florence ranked first in Europe in the famous revival of arts (the Renaissance). Austria occupied Naples and Lombardy in 1713–14, but the cities were liberated in 1848–49 by Mazzini and Garibaldi. Italy did not become a completely united nation until 1870, when Victor Emmanuel became king of the whole realm. Italy entered the First World War on the side of the Allies; civil wars followed the armistice in 1918, and Benito Mussolini established a fascist dictatorship in 1922. Italy declared war against France and Great Britain in 1940, but was defeated three years later by the Allied powers.

Italian Colonies

(Before surrender in 1943)

Eritrea is located in eastern Africa between Ethiopia and the Red Sea, covering an area of 15,754 square

miles and having a population of about 600,573. The capital and chief town is Asmara. The chief industries are agriculture, livestock-raising, and gold mining. British forces occupied Eritrea in 1940.

Italian Somaliland, located in eastern Africa, is bounded on the east by the Indian Ocean and on the west by Kenya, Ethiopia, and British Somaliland. The area is 194,000 square miles, and the estimated population is about 1,300,000. Mogadiscio is the capital and chief city. Incense, gum, hides, ivory, resins, oil are exported. British forces occupied Italian Somaliland in 1940.

Libya is located in northern Africa between Algeria and Tunisia in the west, and Egypt and the Anglo-Egyptian Sudan in the east. Divided into the provinces of Tripoli, Misurata, Derne, and Benghazi, Libya has a total area of 679,358 square miles and a population of about 888,400. The two capitals—Tripoli and Benghazi—are on the Mediterranean coast. Dates, olives, almonds, figs, lemons, and grapes are grown; and tobacco, carpets, leather articles, matting, and embroidered fabrics are exported. Libya was conquered by the British in 1943.

Fourteen Aegean Islands, near the southwestern coast of Turkey in the Mediterranean Sea, were occupied by Italy in 1912 and have a total area of 1,035 square miles. The population is 140,848, and the capital is Rhodes (Rodi).

Other Italian possessions include Tientsin on the left bank of the Pei-Ho River in China (area, 130 acres; population, 7,953), and the Island of Saseno located in the entrance to Valona Bay on the coast of Albania.

Japan

Population of Japan Proper: Estimated in 1939 as 72,875,800.

Population of Empire of Japan (ex-

cluding Manchuria) (census of 1940): 105,226,101.

Area of Japan Proper: 147,327 square miles.

Area of Empire of Japan (excluding Manchuria): 260,379 square miles.

Capital: Tokyo.

Leading Cities: Tokyo, Osaka, Nagoya, Kyoto, Kobe, Yokohama, Seoul (in Korea), Fukuoka, Nagasaki, Yawata, Hakodate, Kumamoto, Kawasaki, Yokosuta, Wakayama, Sasebo, Okayama, Fusan (in Korea), Kanazawa, Otaru, Toyohashi.

Geographic Features: Comprising a group of volcanic islands in the north Pacific Ocean near the east coast of Asia, Japan included within the boundaries of its empire the peninsula of Korea (Chosen), which lies between the Sea of Japan and the Yellow Sea. The highest peaks are Fujiyama (12,425 feet), southwest of Tokyo, and Asahidake (7,513 feet), on the island of Hokkaido. The principal rivers include the Yodo, which flows into the Bay of Osaka, and the Yalu forming a large part of the boundary between northern Korea and Manchukuo (Manchuria).

Industries: Agriculture, mainly rice, grains, tea, tobacco, beans, fruit; manufacturing, mainly silk, textiles, paper, leather, toys, pottery, matting, machinery, wrought iron. The principal minerals are gold, silver, lead, copper, zinc, iron ore, salt, sulphur, white arsenic, chromite, petroleum.

Interesting Features: Six universities; a tunnel over six miles in length from Maebashi to Nagaoka; numerous waterfalls including the "Splendor of the Sun" at Nikko.

History: Japan originated from a minor state founded south of Osaka in 660 B.C. by Jimmu Tenno, and the empire gradually spread toward the northeast. The first written constitution was issued by Prince Shotoku, and in 645 A.D. Kotoku reorganized the government to resemble that of China.

The military governor Yoritomo assumed the title of shogun and ruled (1185-92) in place of the emperor, inaugurating a form of military and civil government that endured until 1868. During the 16th century Japan conducted brief trade relations with Portugal, but had no further contact with the western world until 1854—when Commodore Perry induced the governor to allow commerce with the United States. In 1867-68 a general uprising restored supreme power to the emperor. At war with China from 1894 to 1895, and with Russia from 1904 to 1905, Japan declared war against Germany in 1914. After the First World War the Japanese began a naval program which was limited in 1922 by the Washington Conference. In 1923 a severe earthquake destroyed Tokyo and Yokohama. Invading Manchuria in 1931, Japan organized the state of Manchukuo and invaded China in 1937; Japanese air forces bombed the United States fleet at Pearl Harbor, Hawaii, in 1941. Forced to surrender in 1945, the home islands of Japan were occupied by Allied troops. According to the terms of the surrender, Japan gave up its empire.

Japanese Colonies

(Before surrender in 1945)

Korea (Chosen) occupies a peninsula in eastern Asia between the Sea of Japan and the Yellow Sea, and is separated from Japan by Chosen Strait. The area covers 85,246 square miles; the population in 1939 was 22,633,857. Keijo (Seoul) is the capital and chief city. Silk, rice, tobacco, grains, cotton, cement, paper, pottery, chemicals are produced; the principal minerals include silver, copper, iron, lead, tungsten, graphite. Japan annexed Korea in 1910.

Formosa (Taiwan) is an island located about 200 miles north of the Philippine Islands, and separated from

the southeastern coast of China by Taiwan Strait. The area is 13,880 square miles; the population in 1935 was 5,212,426. Taihoku is the capital and chief city. Rice, sugar, tea, sweet potatoes, jute, camphor are produced, and the principal minerals include gold, silver, coal, copper. The Pescadores (Pheng-hu) are a group of islands 50 square miles in area, lying between Formosa and the Chinese coast. China ceded Formosa to Japan in 1895.

Karafuto occupies the southern part of Sakhalin Island in the Pacific Ocean, and is separated from the east coast of Asia by Tatarski Strait. The principal town is Odomari. Covering an area of 13,930 square miles, Karafuto has a population of about 331,949, and the chief industries are fishing and coal mining. Japan received Karafuto from Russia in 1910.

Japanese Mandates in the Pacific Ocean comprised 623 islands covering a total area of 829 square miles and having a population of about 85,559. The principal groups are the Marshall Islands, the Caroline Islands, the Ladrone or Marianne Islands (with the exception of Guam), the Oga Sa Wara (Bonin) Islands. Phosphorus ores, copra, and coconuts are produced.

The Spratly Islands, located in the South China Sea about 500 miles west of the northern Philippine Islands, cover a total area of 247 acres and are noted chiefly for phosphate deposits.

Kwantung is in eastern Asia below Manchukuo (Manchuria), and occupies the southern portion of the Liaotung peninsula between the Gulf of Chihli and Chosen Bay. Covering an area of 1,438 square miles, Kwantung has a population of about 1,656,726, and the principal cities are Dairen (Daly) and Ryojun. The chief products include salt, rice, tobacco, corn. Japan took over Kwantung after the 1905 war with Russia.

Latvia

Population: 1,950,502.

Area: 25,402 square miles.

Capital: Riga.

Leading Cities: Riga, Liepaja, Daugavpils (Dvinsk), Jelgava (Mitau).

Geographic Features: Located in northern Europe between Estonia and Lithuania, Latvia is low-lying and flat, and its coastline in the west is deeply indented by the Gulf of Riga. The most important rivers are the Dvina in the southeast, the Venta in the west, and the Gauja in the north.

Industries: Agriculture, mainly potatoes, grains, flax; manufacturing, mainly metals, chemicals, spirits, textiles, lumber. Fishing is a prominent industry, and livestock and bees are raised.

Interesting Features: Converging at Riga, Windau, and Libau are three Russian railway lines. Riga has a university, and keeps the harbor open during winter by using ice breakers.

History: Latvia was established as an independent republic in 1918, and was formed largely from the Russian province of Courland. The country (peopled mainly by Lithuanians) entered the League of Nations in 1921, and a constitution was drawn up the following year, providing for a president, parliament (Saeima), and prime minister. In 1940 the Union of Soviet Socialist Republics annexed Latvia.

Liberia

Population: Estimated 1,500,000.

Area: 45,000 square miles.

Capital: Monrovia.

Leading Cities: Monrovia, Robertsport.

Geographic Features: Located on the Atlantic coast in western Africa, Liberia lies between Sierra Leone on the west and Ivory Coast on the east. Much of the interior remains unexplored, but it is known that the highest mountains are from 2,000 to 6,000

feet in altitude. The rivers are short and navigable only in stretches, while tropical forests cover the greater part of the country.

Industries: Mainly agriculture—rice, coffee, fibre from the raffia palm, cacao, annatto seed, palm oil, cassava; sugar, ginger, rubber, ivory, and camwood are also exported.

Interesting Features: The population is composed entirely of Negroes. There are no railroads, but about 180 miles of automobile roads have been constructed. Education is provided by two colleges and 161 schools.

History: Founded in 1821 by the American Colonization Society, Liberia was intended as a colony for liberated Negro slaves returning to Africa. The first settlement was established at Cape Mesurado—the present site of Monrovia—and received great help in its development from Jehudi Ashmun and Robert Gurley. In 1847 Liberia became an independent republic, with Joseph Roberts as its first president. Its later history was marked by many frontier disputes with the French and British. The government sided with the Allies during the First World War, and declared war on the Axis in the Second World War.

Liechtenstein

Liechtenstein is located on the upper Rhine between Austria and Switzerland. Its capital is Vaduz. It has an area of 65 square miles and a population of 11,218. Until 1918 it was a dependency of Austria, but in that year it declared its independence. The country is ruled by a monarch and an elected legislature, the Diet. The country is chiefly agricultural.

Lithuania

Population: Estimated 2,879,070.

Area: 22,959 square miles.

Capital: Vilna (Wilno).

Leading Cities: Vilna, Kaunas (Kovno), Klaipeda (Memel).

Geographic Features: Located in northern Europe, Lithuania is bounded on the north by Latvia and on the west by the Baltic Sea. There are few hills, the highest being the Telsiai-Shavli-Raseiniai (about 1,000 feet) in the northwest. The principal rivers are the Memel and Nemunas in the south, and the Svetoji in the east.

Industries: Mainly agriculture—flax, grains, potatoes, dairying, linseed, poultry, and sheep-raising. Meat, butter, eggs, cattle, corn, hides, wool, timber are exported.

Interesting Features: One university, art schools, about 1,100 miles of railway, several public museums.

History: Organized as a grand duchy in the 13th century, Lithuania became a part of Poland in 1386 and was acquired by Russia in the 18th century, remaining under Russian domination until 1918 when it was made an independent republic. The Union of Soviet Socialist Republics annexed the country in 1940.

Luxemburg

Luxemburg occupies an area of 999 square miles and has a population of 300,000. It is bounded by Germany on the east, Belgium on the west, and France on the south. The capital of the state is Luxemburg. It is a grand duchy. The main industries are agriculture and mining. The country was occupied by the Germans in 1940 and liberated in 1944.

Mexico

Population: 19,473,741.

Area: 763,944 square miles.

Capital: Mexico City.

Leading Cities: Mexico City, Guadalajara, Monterrey, Puebla, San Luis Potosi, Leon, Tampico, Veracruz, Toluca, Aguascalientes, Chihuahua, Saltillo, Pachuca, Orizaba, Toluca de Lerdo.

Geographic Features: Extending north and south near the west coast

are the Sierra Madre Mountains, reaching their maximum altitude at the volcanic peaks of Orizaba (18,696 feet), Popocatepetl (17,882 feet), and Ixtaccihuatl (17,388 feet), all three of which are perpetually covered with snow. In the west near the Gulf of Mexico a continuation of the Rocky Mountains (sometimes called the Sierra Madre Occidental) reaches almost as far as Veracruz. The Rio Grande separates Mexico from Texas in the north; other important rivers are the Yaqui, Aros, Conchos, Fuerte, and Oro Nazas in the north; Panoco in the east, Santiago in the west, and in the south are the Mexicala and Balas as well as the Usumacinta which forms part of the boundary between the state of Chiapas and Guatemala. Among the largest lakes are Chapala and Cuitzco in the west, and Toronto in the north.

Industries: Agriculture, mainly corn, sugar, rice, coffee beans, wheat, tobacco, tomatoes, cotton, cocoa, bananas, sisal; manufacturing, mainly foundry products, leather goods, textiles, paper, cement, pottery, cigars, cigarettes, furniture, brick and tile, glassware, paints and varnishes, soap. Mining is the most important industry, producing gold, silver, zinc, copper, lead, mercury, antimony, graphite, molybdenum, coal, arsenic, petroleum, opal. Lumber is made from spruce, pine, rosewood, cedar, mahogany, logwood.

Interesting Features: National University of Mexico, founded in 1553; over 18,000 miles of railways; volcanic mountain peaks; opal mines in the state of Queretaro, the Isthmus of Tehuantepec.

History: Mexico was discovered in 1518 by de Cordova. The country, peopled mainly by Aztec Indians, was conquered by Cortez in 1521, given the name of New Spain, and colonized by the Spaniards until 1822, when a revolution made it an independent mon-

archy. Following the resignation of Iturbide (the first emperor), a republic was proclaimed with General Guadalupe Victoria as the first president, but numerous civil wars ensued. In 1836 Texas became independent of Mexico. In 1846 a dispute in regard to the Texan boundary resulted in a war between the United States and Mexico, and the latter ceded to the victorious Americans (in 1848) New Mexico, including the greater portion of Arizona, all of Nevada and Utah, as well as sections of Colorado, Wyoming, and Upper California. The United States purchased from the Mexican government in 1854 (the Gadsden Purchase) a large region that is now a part of Arizona and New Mexico. In 1863 Mexico was conquered by the French, and Maximilian of Austria was made emperor; he was shot during a revolution led by Juarez, who afterward became president. Mexico declared war against the Axis in the Second World War.

Monaco

Monaco is a small principality of 7.99 square miles and a population of 23,900 lying on the Mediterranean coast surrounded by the French department of Alpes-Maritimes. The capital is the city of Monaco. Most of the country's revenue is derived from the gaming tables of the casino at Monte Carlo. The country is ruled by a monarchy.

Morocco

Population: (1936) 7,093,720.

Area: 213,350 square miles.

Capital: Rabat.

Leading Cities: Casablanca, Marrakesh (Marrakech), Fez, Rabat, Meknes.

Geographic Features: Located in northwest Africa, Morocco is separated (at its most northern point) from Spain by the Strait of Gibraltar, and is traversed from northeast to southwest

by the Atlas Mountains. The highest peaks are Jebel-Miltsin and Tizi-Tam-jurt (about 12,000 feet). There are no important rivers or lakes.

Industries: Agriculture, mainly grains, linseed, beans, almonds, gums, poultry, cattle, and sheep; manufacturing, mainly carpets, fezzes, silks and woolens, leather goods. Among the principal minerals are phosphate, copper, tin, lead, petroleum.

Interesting Features: Morocco consists of three zones—the Spanish, the French, and Tangier. The last and Mogador are famous as health resorts. Comprising the greater part of the population are the Berbers (mountain dwellers) and Arabs.

History: Morocco was originally peopled by the Mauri (or Maurusii), a Roman civilization lasting from the 1st century B.C. until the 5th century A.D., when the country came under the rule of the Vandals. The latter were conquered by the Byzantines, who were in turn displaced by the Saracens (Arabs) under whose rule Morocco reached the height of its power in the 13th century. Mulai Ismail (1672–1727) recaptured several strongholds in Europe, and Abdu-r-Rahman defeated a French army in 1884. The later history of Morocco has been marked by frequent uprisings against the French. Allied forces occupied Casablanca, Oran, and other cities in 1942.

Nepal

Nepal is an independent state of 54,000 square miles and a population of 5,600,000 lying in the Himalayas between Tibet, Bengal, and British India. Nepal exports rice, grain, hides, and cattle. The capital is Kathmandu. The country is ruled by a maharajah.

The Netherlands (Holland)

Population: Estimated 9,090,000.

Area: 12,862 square miles.

Capital: Amsterdam.

Leading Cities: Amsterdam, Rotterdam, The Hague (s'Gravenhage), Utrecht, Haarlem, Groningen, Arnhem, Leiden, Nijmegen.

Geographic Features: Located in northwestern Europe, the Netherlands is bounded on the west and north by the North Sea and on the south by Belgium. The land is low-lying and flat; the west coast is deeply indented by the Zuider Zee, a gulf covering 1,350 square miles. Among the principal rivers are the Waal and Meuse in the south, the Vecht in the north, and the Lek which becomes the Rhine after crossing into Germany.

Industries: Agriculture, mainly grains, sugar beets, potatoes, dairying, livestock, tulips and other flowers; manufacturing, mainly textiles, chemicals, pottery, shipbuilding, flour mills, distilling and brewing, machinery; fishing is a prominent industry.

Interesting Features: A dam 17½ miles long, connecting the island of Wieringen with the eastern shore; The Hague, official home of Queen Wilhelmina and the seat of government; two universities in Amsterdam; 4,817 miles of canals.

History: Originally peopled by Germanic tribes, the Netherlands was under the domination of Rome until 400 A.D. when the Franks conquered the southern region. After the 8th century most of the country was acquired by Germany and was divided into a large number of feudal principalities, which came under the rule of the dukes of Burgundy between 1384 and 1443. Austria took possession of the Netherlands in 1477, but annexed it to Spain in 1516; the Dutch gained their independence from Spanish rule in 1648 under the leadership of William of Orange. The French conquered the Netherlands in 1794-95, but were driven out in 1813. Two years later Holland and Belgium were united into a single realm by the Congress of

Vienna, but the Belgians re-established their independence in 1832. Neutral during the First World War, the Dutch gave sanctuary in 1918 to the exiled German kaiser. Their kingdom was invaded and occupied by Germany in 1940. Holland was liberated by the Allies in 1945.

Netherlands Colonies

Netherlands East Indies

The Netherlands East Indies comprise a group of islands lying south of Asia and north of Australia. Covering an area of 735,168 square miles, the islands have an estimated population of 72,000,000, and include Sumatra, Borneo, Java, Celebes, Moluccas (or Spice Islands), Dutch New Guinea, Halmahera, and many smaller groups. The chief cities are on the island of Java: Batavia (the capital), Soerabaja, Samarang, and Soerakarta. Among the major products are sugar, tobacco, coffee, cocoa, rubber, tin, teakwood, pepper, cinchona bark, coconuts, palm oil, tea. The Netherlands East Indies were occupied by Japan during the Second World War.

Netherlands West Indies and South American Colonies

Surinam (Netherlands Guiana) is located in the northern part of South America between British Guiana and French Guiana, and is bounded on the north by the Atlantic Ocean. Covering an area of 55,143 square miles, Surinam has a population of 183,730. The capital and chief city is Paramaribo, and the major products include aluminum ore, coffee, sugar, bananas, lumber.

Curaçao comprises two groups of islands: Cucaraco, Bonaire, and Aruba in the Caribbean Sea off the coast of Venezuela, and Saba, the southern portion of San Martin, and St. Eustatius about 150 miles east of Puerto Rico. The total area covers about 381 square miles, and the population is

105,617. Willemstad (on the island of Curaçao) is the capital and chief town; oil refining is the principal industry, and salt, phosphates, and corn are produced.

New Zealand

(See under British Commonwealth of Nations)

Nicaragua

Population: Estimated 1,013,946.

Area: 60,000 square miles.

Capital: Managua.

Leading Cities: Leon, Matagalpa, Managua, Granada.

Geographic Features: Located in Central America between Honduras on the north and Costa Rica on the south, Nicaragua reaches its highest elevations in the interior where Segovia, Matagalpa, Chontales, and other peaks rise from 5,000 to 7,000 feet. The principal rivers are the Segovia (forming part of the northern boundary), the Grande in the central region, and the Siquia in the south. In the southwest are two large lakes—Nicaragua and Managua.

Industries: Mainly agriculture—bananas, sugar cane, coffee, cacao, corn, beans, rice, tobacco, fruit; the forests yield cedar, gums, mahogany, medicinal plants. The most important minerals are gold and silver.

Interesting Features: Universities at Managua, Leon, and Granada; the Pacific Railroad, 171 miles in length; radio stations at Managua, Cabo de Gracias, and Bluefields.

History: Originally peopled by Indians, Nicaragua was conquered for Spain in the 16th century by Francisco de Cordoba and Gil Gonzales Davila, and remained a Spanish possession until 1821 when it became part of Iturbide's empire. A member of the Central American Federation from 1823 to 1839, Nicaragua was organized as an independent republic after a revolt dissolved the Federation. The

later history of the country has been one of civil war and numerous revolutions. In 1926 United States Marines landed at Nicaragua to restore order, and were not completely withdrawn until 1932. The government declared war against the Axis in the Second World War.

Norway

Population: Estimated 2,937,000.

Area: 124,556 square miles.

Capital: Oslo.

Leading Cities: Oslo, Bergen, Trondheim, Stavanger.

Geographic Features: Located in northern Europe, Norway occupies the western portion of the Scandinavian peninsula, and extends northward to the Arctic Ocean. Mount Sylfjallen (15,781 feet) rises in the Kjølen Mountains which separate Norway from Sweden in the east. The Norwegian coast is indented by numerous deep fjords. Among the principal rivers are the Otter, Bauna, and Glommen in the south, as well as the Tana (forming part of the boundary between Norway and Finland) and the Alten in the north. The largest of the many lakes are Mjosen, Femunden, and Ros Vand.

Industries: Agriculture, mainly grains, corn, potatoes, dairying, butter; manufacturing, mainly machinery, metal work, food products, textiles, paper, soap, electro-chemical products, animal oils. Fishing is a prominent industry, and cod, herring, whale, salmon, mackerel, and other fish are caught in huge quantities. Iron ore, zinc, silver, nickel, copper, lead, pyrites, bauxite, and tin are mined.

Interesting Features: The University of Oslo, founded in 1811; about 2,500 miles of railway, most of which is owned by the government; Jostedalstraen, largest glacier field in Europe.

History: In prehistoric times Norway was peopled by Germanic tribes,

and from the 8th century to the 10th by the Vikings—a warlike people who terrorized European coastal cities. In 1028 the country was conquered by King Canute of Denmark; but after his death in 1035 the former dynasty was restored and Magnus I became king. The reign of Sverre (1177–1202) was marked by numerous conflicts with the Church party (the Baglar). Haakon IV, who acquired Greenland and Iceland, was succeeded by one of the wisest Norwegian rulers, Magnus VI who was devoted to peace and terminated a war of long duration against Scotland. In 1397 Denmark, Norway, and Sweden were united in the Union of Kalmar, and although Sweden withdrew from the Union in 1450, Norway remained under Danish domination until 1814. By the terms of the Treaty of Kiel, Norway was ceded to the Swedes by the Danish king (who retained Iceland), and in spite of many revolts was unable to regain its independence until 1905 under Haakon VII. After the First World War—during which the Norwegians remained neutral—financial and labor troubles harried the kingdom. In 1940 Norway was invaded and occupied by Germany. It was liberated in 1945.

Norwegian Colonies

Spitzbergen (Svalbard) comprises a group of islands located in the Arctic Ocean north of Barents Sea and approximately 370 miles north of the Norwegian coast. Covering about 24,290 square miles, the colony has a population of 2,700. The principal product is coal.

Jan Mayen, an island 144 square miles in area, is located in the Arctic Ocean about 300 miles east of Greenland; there are no inhabitants except those working with the Meteorological Institute. Other colonies are Bouvet Island (area 22 square miles) in the south Atlantic Ocean, and Peter I

Island (area 94 square miles) in the Antarctic Ocean.

Palestine

Population: Estimated 1,585,500.

Area: 10,429 square miles.

Capital: Jerusalem.

Leading Cities: Tel Aviv, Jerusalem, Haifa, Jaffa (Joppa).

Geographic Features: Located in southwestern Asia, Palestine is bounded on the west by the Mediterranean Sea and Egypt, and on the east by Transjordan. In the east a range of limestone mountains reaches a maximum height of nearly 4,000 feet, the highest peaks being Tabor, Gilboa, and Ebal. The Jordan River and the Dead Sea form part of the eastern boundary.

Industries: Mainly agriculture—citrus fruit, grains, olives, melons, tomatoes, figs, grapes, bananas, wine-making; the principal minerals are limestone, gypsum, sandstone, sulphur, rock salt.

Interesting Features: Hebrew University (opened in 1925) in Jerusalem; the Mosque of Omar containing the sacrificial stone of Abraham; the Church of the Nativity in Bethlehem, said to be the oldest Christian church in the world.

History: Palestine was peopled by cave dwellers in about 3500 B.C. A few centuries later a Semitic race called the Canaanites invaded the region, but were conquered in 1479 B.C. by Thutmose III of Egypt. The Hebrews, arriving soon afterward, were united temporarily under Saul, David, and Solomon, and later formed the kingdoms of Judah and Israel. In 722 B.C. the Assyrians destroyed Damascus and Israel, and Judah and Jerusalem were taken by the Babylonians in 586 B.C. Alexander the Great captured Palestine in 332 B.C. The coming of Jesus had a profound effect on the history of Palestine, which became a noted center of pilgrimages. Under the domination of the Moslems from 636 until four

centuries later, when the Crusaders organized the kingdom of Jerusalem, Palestine was conquered in 1187 by Saladin (sultan of Egypt and Syria) and in 1516 by the Ottoman Turks, who remained in power until the First World War. Jerusalem was occupied by the British in 1917, and Great Britain assumed control of Palestine, under a mandate from the League of Nations. Many outbreaks of violence have occurred between the Jews and the Arabs as a result of the immigration of Jews into the country.

Panama

Population: Estimated 635,836.

Area: 33,667 square miles.

Capital: Panama.

Leading Cities: Panama, Colon.

Geographic Features: Located in Central America between Costa Rica in the west and Colombia in the east, Panama is bounded on the north by the Caribbean Sea and on the south by the Pacific Ocean. The central part of Panama is traversed by the Canal Zone, which contains within its boundaries the Panama Canal. Among the principal mountain ranges are the Serrania del Darien near the Colombian border, and the Serrania del Tabasara containing Chiriqui Volcano in the west. The most important rivers include the Chepo, Chucunaque, and Sambu in the east, and the Sixaola forming part of the western boundary.

Industries: Mainly agriculture—coffee, bananas, cacao, coconuts, sugar cane, rubber, tobacco, sarsaparilla; cattle-raising and pearl-fishing are prominent industries, and hides as well as turtle shells are exported. The chief minerals are gold, coal, manganese, asbestos, iron. Mahogany and other valued woods are obtained from the forests.

Interesting Features: The National University at Panama City; restricted immigration; compulsory use of Span-

ish, the official language; the Canal Zone.

History: Panama was originally inhabited by Indians, and the first white settlement was founded at Santa Maria la Antigua del Darien by Francisco Pizarro and Fernando de Enciso in 1510. Panama gained its independence from Spain in 1821 and became a part of Colombia until 1903, when a republic was established with Manuel Amador Guerrero as the first president. In the same year Panama granted the United States the use of the Isthmus for the building of a canal, receiving in payment \$10,000,000 and an annuity of \$250,000. The government declared war on the Axis during the Second World War.

Paraguay

Population: Estimated 1,040,420.

Area: (including El Chaco) 174,854 square miles.

Capital: Asuncion.

Leading Cities: Asuncion, Villarica, Concepcion.

Geographic Features: Located in the southern part of South America, Paraguay is separated from Argentina on the south by the Parana and Pilcomayo rivers. There are no high mountains, and numerous swamps occupy a large area in the south. The Paraguay River traverses the country in the south central region.

Industries: Mainly agriculture—tobacco, cotton, livestock-raising, oranges, yerba mate (Paraguay tea). Hides, beef products, vegetable oils, tannin, lace, lumber are exported.

Interesting Features: Regular steamer service from Buenos Aires to Asuncion, compulsory military service, the University in Asuncion, about 690 miles of railway.

History: Paraguay was originally peopled by Guarani Indians, and the first white settlement was established in 1537 at Asuncion by Juan de Salazar and Gonzalo de Mendoza. In 1721

Jose de Antequera led a revolution against the Spanish colonial governor, and ruled Paraguay as a dictator for ten years. The country was a part of the viceroyalty of Buenos Aires from 1776 until 1812, when an independent republic was organized under Gaspar Rodriguez Francia. Paraguay was defeated in a war with Brazil, Argentina, and Uruguay (1865-70). In later years numerous revolutions and civil wars occurred. At war with Bolivia from 1933 to 1935, Paraguay sided with the Allies during the Second World War.

Peru

Population: 7,023,111.

Area: 532,000 square miles.

Capital: Lima.

Leading Cities: Lima, Callao, Arequipa, Cuzco.

Geographic Features: Located in the northwest part of South America, Peru is bounded on the west by Ecuador and the Pacific Ocean. The Andes Mountains traverse the western region, the highest peaks being Huascan (22,188 feet) and Chachani (21,220 feet). Among the principal rivers are the Putumayo (Ica) forming part of the northern boundary between Peru and Colombia, the Napo in the north, the Ucayali in the east, and the Marañon and Huallago in the north central portion. Lake Titicaca extends into Bolivia in the southeast.

Industries: Agriculture, mainly cotton, sugar cane, grains, potatoes, coffee, cacao, beans, corn; manufacturing, mainly copper bars, petroleum derivatives, sugar, glass, furniture. Wool and hides are exported. The most important minerals are gold, silver, iron, copper, zinc, vanadium, lead, petroleum, sulphur.

Interesting Features: The University of San Marcos (founded in 1551); a new 500 mile highway from Lima to Pucallpa; compulsory military service; about 2,800 miles of railway.

History: Peru was originally peopled by Inca Indians, and the first white settlement was founded by Francisco Pizarro in 1532 at San Miguel. Nunez Vela was the first viceroy of Peru, and his most outstanding successor during the 16th century was Francisco de Toledo. The country became an independent republic in 1842. Peru and Bolivia were defeated in a war with Chile (1879-84), and revolutions continued to be frequent. Improvement in international relations and economic expansion began with the election of Augusto Leguia as president in 1908. He also served from 1919 to 1930, when he was overthrown by a revolution. Peru sided with the Allies in the Second World War.

Poland

Population: Estimated 34,775,698.

Area: 150,470 square miles (as of 1944).

Capital: Warsaw.

Leading Cities: Warsaw, Lodz, Lwow (Lemberg), Posen, Krakow, Katowice, Czestochowa, Bydgoszcz (Bromberg), Sosnowiec, Lublin, Gdynia.

Geographic Features: Located in the north central part of Europe between the Union of Soviet Socialist Republics on the east and Germany on the west, Poland is traversed on the southern border by the Carpathian Mountains. In the east are the Pripyet Marshes. The principal rivers are the Wista (Vistula) in the west and central portions, and the Bug and Dniestr in the east.

Industries: Mainly agriculture—grains, potatoes, sugar beets, flax, corn. Sugar is refined. Textiles are manufactured in Lodz, and considerable lumber is produced. The most important minerals are coal, iron, salt, zinc, lignite, potash, petroleum, natural gas.

Interesting Features: The airport (opened in 1934) at Warsaw; the

Bydgoszcz Canal from the Vistula to the Netze; the Galician petroleum fields; forests covering 23 per cent of the country.

History: Originally peopled by Slavic tribes, Poland was created from numerous small states in the 10th century, and the first king of importance was Mieczyslaw I (960–992) who introduced Christianity into the country. The invasion of the Tatars in 1241 devastated huge areas. Wladislaw I, made king in 1320, began a long war with Germany; peace was restored under Casimir III (1333–70), whose reign is known as the Golden Age of Poland. Lithuania and Poland were united in the 14th century, and Wladislaw III (1434–44) made great conquests against the Turks. Protestantism won numerous converts, but the peasant classes remained Catholic. Poland acquired Livonia after a war with Russia and Sweden. Civil wars followed, the king abdicated in 1668, and an invasion by the Turks was repelled by John III of Sobieski. From 1772 until 1795 Poland was gradually divided among Russia, Austria, and Prussia, and was not re-established as an independent nation until it became a republic after the First World War. In 1939 Poland was invaded and conquered by Germany. According to the Yalta Agreement among the United States, Great Britain, and the Soviet Union, the eastern portion of Poland was ceded to the Soviet Union. Poland later received a portion of eastern Germany.

Portugal

Population: 7,380,906.

Area: 35,582 square miles.

Capital: Lisbon.

Leading Cities: Lisbon, Oporto (Porto), Setubal, Coimbra, Braga.

Geographic Features: Located in southwestern Europe, Portugal lies between Spain on the east and the Atlantic Ocean on the west. The highest

mountain range—the Serra de Estrella—rises in the north central region to a height of 6,540 feet in the Milhao near Covilha. Among the principal rivers are the Douro in the north, and the Tejo (Tagus) and Guadiana in the south. Two large bays, Seubal and Tejo, indent the western coastline.

Industries: Agriculture, mainly grapes for wine-making, olive oil, fruit, potatoes, tomatoes, rye, livestock-raising, wheat; many sardines are exported, as well as hides and wool. The chief manufactured products are textiles, cork articles, leather, silk, paper, porcelain tile, gold and silver filigree, firearms. Coal, copper, lead, tin, sulphur, gypsum, marble, salt, lithium are important minerals.

Interesting Features: The University at Coimbra; historic Da Gama Tower; about 2,000 miles of railway; six art colleges, compulsory military service for all males from 20 to 48 years of age.

History: In ancient times Portugal was a Roman province known as Lusitania, and in the 5th century was peopled by the Suevi who were conquered in the 6th century by the warlike Visigoths. Occupied by the Saracens (Arabs) two centuries later, the realm remained under Arab domination until 1139 when Alfonso, son of Henry of Burgundy, ascended the throne; in 1147 Lisbon was taken from the Saracens. In the 15th century Portugal began a long period of maritime exploring and colonization. Vasca da Gama reached India by way of the Cape of Good Hope in 1497–98, and Brazil was acquired in 1500. Portugal was ruled by Spain from 1580 until 1640, and was invaded by the French under Napoleon in 1808. Brazil became independent in 1822. Portugal was torn by numerous civil wars between the conservatives and the progressives, and was organized as a republic after the dethronement of Manoel II in 1910 but Royalist up-

risings and anti-clerical laws created great unrest. Portugal is now ruled by a dictatorship. The country participated in the First World War on the side of the Allies, but remained neutral in the Second World War.

Portuguese Colonies

Angola (Portuguese West Africa) is bounded on the north by Belgian Congo, on the east by Northern Rhodesia and on the west by the Atlantic Ocean. The area is 481,226 square miles, and the population is about 3,533,300. Nova Lisboa (the capital) and Luanda are the chief towns. Ivory, diamonds, coffee, rubber, wax, coconuts, tobacco, cotton, sugar are produced.

Mozambique (Portuguese East Africa) lies south of Tanganyika and northeast of the Union of South Africa, and is separated from Madagascar by Mozambique Channel. The area is 297,654 square miles, and the population is about 4,995,750. Laurence Marques is the capital and chief city. The major products include sugar, coconuts, and beeswax.

Portuguese Guinea is located on the northwest coast of Africa between Senegal on the north and French Guinea on the south, and covers an area of 13,944 square miles. Bolama is the capital and chief city. Among the exports are ivory, rubber, hides, and wax.

Portuguese India comprises Goa on the southwest coast of India, Damão about 100 miles north of Bombay, and the island of Diu in the Arabian Sea 140 miles west of Damão. The total area covers 1,537 square miles, and the population is about 601,000. Salt, manganese, fish, coconuts, copra, and spices are exported.

Portuguese Timor occupies the eastern portion of the island of Timor in the Netherlands Indies, and is separated from the coast of northern Australia by the Timor Sea. The area is 7,330 square miles, and the popula-

tion is about 463,796. Dili is the capital and chief town. Coffee, sandalwood, wax, and copra are the major products. Portuguese Timor was captured by Japan in 1942.

The Cape Verde Islands are located in the Atlantic Ocean. The capital and chief town, Porto Praya, is 357 miles from Dakar on the northwest African coast. The total area of the islands is 1,557 square miles, and the population is about 174,403. Coffee, fruit, grains, hides, and medicinal products are the principal exports.

The islands of San Tome and Principe are in the Gulf of Guinea about 125 miles from the coast of French Equatorial Africa, and cover an area of 597 square miles. The population is 48,809. Among the major products are coffee, cacao, cinchona, and rubber.

Macao is located on an island of the same name at the mouth of the Canton River in southeastern China, and covers an area of six square miles. The population is 340,260.

The Azores and the Madeira Islands, located in the North Atlantic Ocean, are not considered colonies but an integral part of the republic of Portugal. Comprising the islands of Sao Jorge, Terceira, Sao Miguel, Pico, Flores, and Fayal, the Azores have an area of 922 square miles and a population of 232,012. The capital and chief town is Ponta Delgada. The islands served as an Allied air base in the Second World War. The Madeira Islands lie about 350 miles west of Morocco, covering 314 square miles; the population is 211,610, and Funchal is the capital and principal city.

Rumania

Population: 13,291,000.

Area: 74,214 square miles.

Capital: Bucharest.

Leading Cities: Bucharest, Chisinau (Kishinev), Czernowitz (Cernauti),

Iasi (Jassy), Galati (Galatz), Cluj (Kolozsvár), Timisoara (Temesvár), Aradea, Arad, Ploesti, Braila, Craiova, Brasov (Kronstadt).

Geographic Features: Located in southern Europe, Rumania is bounded on the east by the Union of Soviet Socialist Republics and the Black Sea, and on the south by Bulgaria. The highest mountain is Negoi (8,346 feet) in the Transylvanian Alps which rise in the south central region. Among the most important rivers are the Danube—forming part of the southern boundary, the Prut, Dnestr, and Siretul in the east, and the Oltul in the south.

Industries: Mainly agriculture—grains, vineyards, fruit, stock-raising, corn, tobacco, olives. Distilleries and flour mills are numerous. The principal minerals include gold, copper, iron, salt, zinc, petroleum, lignite, natural gas, pyrites.

Interesting Features: Universities at Iasi, Bucharest, Cluj, Czernowitz; compulsory military service for all males from 21 to 50 years of age; about 7,000 miles of railway.

History: Rumania was known in ancient times as Dacia, and was peopled by the Romans. In the Middle Ages the principalities of Moldavia and Wallachia were formed, and after being conquered by the Turks, remained under the rule of the Ottoman sultans until the latter ceded both to Russia in 1829. Russian efforts to govern Moldavia and Wallachia were halted by the Crimean War. In 1859–61 the two principalities were united into the kingdom of Rumania, under Alexander John I who was succeeded in 1866 by Carol I. Rumania was not officially declared a kingdom until 1881, and its independence was recognized by the terms of the Treaty of San Stefano. Joining the Allies in 1916, Rumania was at once occupied by Germany, but received large grants of territory as a result of the Treaty of Versailles. Postwar economic troubles created

much dissension in the country; in 1925 Carol II abdicated in favor of his son Michael, resuming the crown in 1930 but again abdicating in 1940. Rumania declared war against the Union of Soviet Socialist Republics, Great Britain, and the United States in 1941, and accepted peace terms four years later, when King Michael declared war on Germany and Hungary.

San Marino

San Marino, the oldest republic in the world, is located in the Apennine Mountains near the Italian city of Rimini. It has an area of 38 square miles and a population of 14,545.

Salvador

Population: Estimated 1,829,816.

Area: 13,176 square miles.

Capital: San Salvador.

Leading Cities: San Salvador, Santa Ana, San Miguel.

Geographic Features: Salvador is located in Central America between Honduras and the Pacific Ocean. North of the Pacific coast rise several volcanic mountain ranges, the highest peak being Santa Ana (8,300 feet). The most important river is the Lempa in the north, flowing south to the ocean.

Industries: Mainly agriculture—coffee, cacao, sugar cane, tobacco, rubber, indigo; numerous cattle are raised. The principal minerals are gold, silver, iron, mercury, copper.

Interesting Features: About 330 miles of railway; Indians, who comprise 20 per cent of the population; compulsory military service in case of war; the National University and National Institute.

History: Salvador was originally peopled by Indians, and the first white settlement was founded by the Spanish explorer Pedro de Alvarado at San Salvador in 1528. A part of the cap-

taincy-general of Guatemala until 1821, Salvador declared its independence from Spain and was annexed to Mexico until 1824, becoming a state in the Central American Federation from 1824 to 1839, when it was made a republic. In later years many revolutions disrupted the country, complicated by interference from Guatemala. Salvador was the only nation of Central America that did not declare war on Germany in 1917. In 1941 the government declared war against Japan, Germany, and Italy, and in 1942 severed relations with Vichy France.

Spain

Population: 26,251,188.

Area: 196,607 square miles.

Capital: Madrid.

Leading Cities: Barcelona, Madrid, Valencia, Seville, Malaga, Zaragoza (Saragossa), Bilbao, Murcia, Granada, Cartagena, Valladolid, Palma, Santander, San Sebastian, Alicante, Oviedo, Cadiz, Vigo, Lorca.

Geographic Features: Located in southwestern Europe, Spain is separated from Morocco to the south by the Strait of Gibraltar, and from France by the Pyrenees Mountains which reach a height of over 11,000 feet. Other important mountain ranges are the Cantabrian in the northwest and the Sierra Morena in the southern region. Among the principal rivers are the Mino—forming part of the boundary between Spain and Portugal in the west, the Ebro and Duero in the north, the Tajo (Tagus) in the central portion, and the Guadiana and Guadalquivir in the south.

Industries: Mainly agriculture—rice, grains, olives, grapes, wine-making, fruit, almonds, onions, esparto, flax, cork, livestock-raising, tobacco; pottery, silks, and cotton products are important industries. Coal, copper, iron, mercury, zinc, lignite, silver, cobalt, sulphur, phosphates are mined.

Interesting Features: The Alcazar,

historic castle at Segovia; the cathedral in Seville; 11 universities, of which the largest is at Madrid; the Alhambra, ancient Moorish palace in Granada.

History: Spain was peopled in prehistoric times by the Iberians, who later mingled with the Celts producing a race known as the Celtiberians. The country was conquered in about 236–220 B.C. by the Carthaginians, and by the Romans in 19 B.C., remaining under the domination of Rome until the 5th century A.D. In 711 the Arabs (Saracens) invaded Spain and made it an independent Mohammedan realm in 756. The Franks conquered the northeastern part of Spain toward the end of the 8th century, and numerous small kingdoms rose to power—including Navarre, Castile, Aragon, and Leon. Portugal was established as an independent nation in the 11th century. Two centuries later the French kings occupied many of the Mohammedan dominions, which became confined to Granada. In 1478 the first Inquisition was founded, and in 1492 Ferdinand and Isabella drove the Jews from Spain. The power of the Spanish monarchs decreased after the defeat of the Grand Armada in 1588, and numerous colonies were lost—Louisiana in 1800, possessions in America between 1810 and 1826, and Cuba, Puerto Rico, and the Philippines after the war with the United States in 1898. Spain remained neutral during the First World War. A republican form of government was organized in 1931. A civil war was fought from 1936 until 1939, resulting in the establishment of a fascist dictatorship under General Francisco Franco.

Spanish Colonies

Spanish Morocco, located in north Africa, is separated from Spain by the Strait of Gibraltar and the Mediterranean Sea, and occupies an area of 18,350 square miles. The population is

about 750,000; Tetuan (the capital) and Ceuta are the leading cities.

Rio de Oro and Adrar are in north-west Africa south of Morocco and west of Algeria, and cover a total area of 109,200 square miles; the population is about 20,500. Northeast of Rio de Oro is Ifni (965 square miles). Rio Muni, which is also known as Spanish Guinea, lies south of Cameroons on the Gulf of Guinea; the total area, including the islands Fernando Po, Annobon, Corisco, and Elobays, is 10,036 square miles. The population is 140,000. Santa Isabel (the capital) on Fernando Po, and Bata in Rio Muni are the leading cities.

The Canary Islands, near the coast of Rio de Oro, and the Balearic Islands in the Mediterranean Sea are considered provinces of Spain.

Sudan, Anglo-Egyptian

Population: 6,342,477.

Area: 969,000 square miles.

Capital: Khartoum.

Leading Cities: Omdurman, Khartoum.

Geographic Features: Located in eastern Africa, Anglo-Egyptian Sudan is bounded on the north by Egypt, and on the east by the Red Sea and Ethiopia. In the north lies the Nubian Desert. The principal rivers are the Nile and its two branches—the White and Blue Nile—in the east, and the Bahr el Jebel, the Sobat and Akobo in the south.

Industries: Mainly agriculture—cotton, gum arabic, senna leaves, sesame, dates, nuts, corn, livestock-raising, beans. Hides, skins, mahogany, mother-of-pearl shells, and ivory are important products. The most important minerals are gold and salt.

Interesting Features: The population consists of Arabs, Negroes, and Nubians; the educational system is operated largely by the government.

History: Originally peopled by Negro tribes, Anglo-Egyptian Sudan

was conquered by Egyptian forces under Mohammed Ali in 1820. In 1883 Mohammed Ahmed—known as the Mahdi, or leader of the faithful—captured El Obeid; he took Khartoum two years later but soon died, and his successor (the Khalifa) was defeated by Lord Kitchener at Omdurman in 1898. The following year a convention between Great Britain and Egypt provided for the appointment of an Egyptian governor-general for Anglo-Egyptian Sudan. The country is now under the joint sovereignty of Great Britain and Egypt.

Sweden

Population: 6,458,221.

Area: 173,347 square miles.

Capital: Stockholm.

Leading Cities: Stockholm, Göteborg (Gothenburg), Malmö, Norrköping, Helsingborg, Borås.

Geographic Features: Located in northern Europe, Sweden covers the greater part of the Scandinavian peninsula and is bounded on the west by Norway and on the east by Finland, the Gulf of Bothnia, and the Baltic Sea. Among the highest peaks are Sylfjallen on the western border (15,781 feet) and Kebnekaise (6,965 feet) in the north. The islands of Gotland and Oland in the Baltic Sea are Swedish possessions. Largest of the many rivers are the Stora Lule, Kalix, Tornea, Vindel, and Ume in the north, and the Indals, Ljunga, and Ljusna in the south central region. The numerous lakes—of which Vanern and Vattern are the most important—cover 14,000 square miles of Sweden's area.

Industries: Agriculture, mainly potatoes, grains, dairying and raising of livestock. Sweden's leading manufactured products are iron and steel, lumber and paper pulp, matches, machinery, porcelain, glass, telephone supplies, cream separators, rayon and other textiles. The principal mineral is iron ore.

Interesting Features: About 10,000 miles of railway; a government-owned hydroelectric plant in Lapland, north of the Arctic Circle; compulsory military service for all males from 20 to 47 years of age; University of Uppsala (founded in 1477); the Cathedral of St. Mary on the island of Gotland. Is a constitutional monarchy.

History: In prehistoric times Sweden was peopled by Nordic races called the Suiones and the Goutai, and the first prominent king was Eric who reigned in the 10th century. Numerous warlike Swedes joined the Vikings, bands of Scandinavian pirates who terrorized the European coasts. Christianity was established in Sweden under Olaf Skötkonung in 829, but Germanic paganism persisted until the 12th century. In 1397 Sweden, Norway, and Denmark were united under the Danish Queen Margaret; Sweden once again became a separate kingdom under Gustavus Vasa in 1523. From 1697 until 1718 Charles XII ruled, warring against Russia and other nations and impoverishing his country. Sweden and Norway were united from 1814 to 1905, when Norway withdrew from the union. Neutral during the First World War, Sweden was distressed by economic difficulties following the armistice in 1918. Gustav V ascended the throne in 1907 after the death of Oscar II. Sweden was neutral during the Second World War.

Switzerland

Population: 4,265,703.

Area: 15,737 square miles.

Capital: Berne.

Leading Cities: Zurich, Basle, Geneva, Berne, Lausanne, St. Gall, Winterthur, Lucerne.

Geographic Features: Located in southwestern Europe north of Italy and east of France, Switzerland is traversed by the famous Alps which rise to a height of 15,217 feet at Dufour Peak of Monte Rosa. The Jura moun-

tain range is in the northwest. The Rhine, forming part of the north boundary, and the Rhone in the south are the principal rivers. Largest of the many lakes are Geneva, Constance, and Neuchatel.

Industries: Agriculture, mainly dairying, cheese, livestock-raising, fruit, tobacco, grains, wine-making, potatoes; manufacturing, mainly watches, clocks, textiles, machinery, chocolate, embroidery. The foremost minerals include iron ore, manganese, and salt.

Interesting Features: The University at Basle, founded in 1460; the ancient Castle of Chillon on Lake Geneva; the International Red Cross Committee at Geneva; about 3,230 miles of railway; compulsory military service for all males from 18 to 60 years of age.

History: Switzerland was peopled in ancient times by the Helvetians and the Rhaetians, and was conquered by the Romans in the first century B.C., remaining under Roman domination for four centuries. The Alemanni and Burgundians occupied the country but were displaced by the Franks in 496-534. Following the dissolution of the Frankish kingdom in the 9th century, most of Switzerland was made a part of the duchy of Alemannia (Swabia). In the 11th century Conrad II included the whole of Switzerland within the boundaries of his Holy Roman (German) Empire, and Swiss independence was not re-established until the Peace of Westphalia was signed in 1648. The French occupied Switzerland in 1798, founding the Helvetic Republic, but the former cantonal confederation form of government was restored by Napoleon in 1803. Twelve years later the perpetual neutrality of Switzerland was decreed by the Congress of Vienna. In 1847 a civil war occurred between the Protestant and Catholic elements of the country. Switzerland remained neutral

during the First and Second World Wars.

Syria and Lebanon

Population: 3,630,000.

Area: 57,900 square miles.

Capital: Damascus (of Syria); Beirut (of Lebanon).

Leading Cities: Damascus, Alep (Aleppo), Beirut, Homs, Hama, Tripoli (Tarabalus).

Geographic Features: Located in southwestern Asia below Turkey, Syria and Lebanon lie between Iraq on the east and the Mediterranean Sea on the west. In the south is the vast Syrian Desert. Among the principal mountain ranges are the Jebel Nusairiyeh and Jebel el Charbi near the Mediterranean coast; the most important river is the Euphrates, which traverses northeast Syria. The Sea of Galilee occupies a part of the southwest boundary between Syria and Palestine.

Industries: Mainly agriculture—to-bacco, grains, fruit, wine-making, cotton, corn, sorghums, olives, livestock-raising; silk is produced.

Interesting Features: Universities at Damascus and Beirut; the large percentage of Moslem inhabitants; about 250,000 Bedouin tribesmen; the famous Sea of Galilee mentioned in the Bible; agricultural colleges at Semelie and Bekaa.

History: Syria was peopled in prehistoric times by Semitic tribes, notably the Hittites, who were conquered by Egypt in 1500 B.C. After the decline of Egyptian power the Phoenicians dominated Syria, which was successively invaded by the Assyrians, Babylonians (Chaldeans), Persians, the Greeks, Macedonians (Seleucidae), Rome, and the Byzantines. In 635 the caliph Omar captured Damascus, making Syria the province of Islam. The country was conquered by the Seljuks in the 11th century, the Crusaders, Saladin, the Mongols, and

Mamelukes, and the Ottoman Turks in 1516. Syria remained under Moslem Turkish rule until after the First World War, when it became a mandate of France, becoming independent (with Lebanon) in 1943.

Thailand (Siam)

Population: Estimated 15,718,000.

Area: 200,148 square miles.

Capital: Bangkok.

Leading Cities: Bangkok, Ayudhya, Chiangmai (Kiangmai).

Geographic Features: Located in southeastern Asia, Thailand lies between French Indo-China on the east and Burma on the west, and extends southward along the Malay peninsula to the Malay States. The highest elevation is Mogadok, 5,000 feet in height, in the western mountains which form the boundary between central Siam and Burma. Among the principal rivers are the Menam—rising in the north and flowing south—and the Mekong on the eastern boundary.

Industries: Mainly agriculture—rice, para-rubber, tobacco, coconuts, cotton, pepper, areca nuts, cardamoms, gamboge; teakwood is obtained from the large forests. Coal, tin, iron ore, tungsten, wolfram, manganese, antimony, zinc, mercury are mined.

Interesting Features: More than 18,000 Buddhist temples, designs traced on silver at Nakon Sritamaraj, about 1,900 miles of railway, compulsory military service for all males from 18 to 30 years of age.

History: In ancient times Chinese races mingled with the Siamese, particularly after the founding of Lampun (Labong), the first Lao capital of Siam, founded in 575 A.D. Ayudhya was captured by the Burmese in 1555 and 1767. The Portuguese (1511) were the first Europeans to enter Siam, and were followed by the Dutch, English, and French. Burma again captured Siam during 1690–1759, and was de-

feated by Pye-ya-tak who became king and was murdered by his general, Chakri, the latter seizing the throne in 1782. Maha Mong-Kut (1851-68) was a methodical and energetic ruler. Siam declared war on Germany and Austria-Hungary in 1917, became Thailand in 1939, and was reorganized as a limited monarchy three years later. Although the government declared war on the Allies in the Second World War, the population was sympathetic to the Allies and aided U.S. undercover agents.

Tunisia

(See under French Colonies)

Turkey

Population: 17,869,901.

Area: 294,416 square miles.

Capital: Ankara.

Leading Cities: Istanbul, Smyrna (Izmir), Ankara, Adana, Bursa (Brusa), Kayseri (Kaisaria).

Geographic Features: Located in southeastern Europe and southwestern Asia, Turkey (in Europe) is bounded on the east by the Black Sea and on the west by Greece and the Aegean Sea. In Asia, Turkey lies north of Syria, Iraq, and the Mediterranean Sea. The principal mountain range is the Taurus in the south, while the highest peak, Mount Ararat (16,916 feet), rises in the east near the border of Iran. Among the major rivers are the Coruh and Tigris in the east, the Sakarya in the west, and the Kizil in the north central region. The largest lakes are the Van, Tuz, and Beysehir.

Industries: Agriculture, mainly tobacco, grains, cotton, opium, olives, figs, fruit, nuts; manufacturing, mainly carpets, silks, and wool. Fishing is a prominent industry. The minerals include manganese, chrome ore, copper, borax, antimony, asphalt, petroleum, gold, silver, salt.

Interesting Features: The historic Saint Sophia Mosque at Istanbul; universities at Ankara and Istanbul; forests covering about 20 million acres; over 4,000 miles of railway.

History: The origin of the Turks is obscure; coming from central Asia, they first occupied Turkey in the 13th century, and their first known sultan was Osman. Led by Suleiman, they invaded Europe during the 14th century, and in 1402 Tamerlane and the Mongols defeated the Turkish sultan Bajazet. Turkey attained the height of its power under Suleiman II in the 16th century; he attempted to conquer Europe, besieging Vienna unsuccessfully in 1529. His successors waged many minor wars which undermined the stability of the empire. Supported by England and France, the Turks won the Crimean War against Russia (1853-56). At war with Italy from 1911 to 1912, and with Bulgaria, Greece, and Serbia from 1912 to 1913, Turkey became an ally of Germany in the First World War. Sultan Mohammed VI was deposed in 1922, and three years later a republican form of government was adopted. Turkey ended relations with Germany in 1944.

Union of South Africa

(See under British Commonwealth of Nations)

Union of Soviet Socialist Republics (Russia)

Population: Estimated 192,695,710.

Area: 8,819,791 square miles.

Capital: Moscow.

Leading Cities: Moscow, Leningrad, Kharkov, Baku, Kiev, Tashkent, Odessa, Gorki (Nizhni-Novgorod), Rostov, Sverdlovsk, Tiflis (Tbilisi), Stalingrad, Dnepropetrovsk, Yakutsk, Saratov, Novosibirsk, Stalino, Kuibyshev, Astrakhan, Omsk, Chelyabinsk, Voronezh, Vladivostok, Grozny, Sta-

linsk, Zaporozhe, Ivanovo, Minsk, Yaroslavl, Magnitogorsk, Samarkand, Irkutsk, Sevastopol.

Geographic Features: The Union of Soviet Socialist Republics occupies the greatest area of any nation in the world, covering a large part of eastern Europe and northern Asia. The principal mountain ranges are the Ural—on the eastern edge of the European section of the country—the Caucasus which rises between the Black and Caspian seas and contains Mount Elbruz (18,465 feet), and in eastern Asia the Yablonovy, Dzugdzhur, Gydan, Cherski, and Verkhoyansk. Among the most important rivers are the Volga (2,300 miles in length) and the Ural flowing into the Caspian Sea, and the Don and Dnieper which drain into the Black Sea. In Asia the Ob, Yenisei, and Lena flow into the Arctic Ocean in the north. The largest lakes are Ladoga (7,000 square miles in area) northeast of Leningrad, Onega lying south of Seg Lake, Baikal, north of Mongolia, and Balkhash west of Sinkiang. The Aral Sea in southwest Asiatic U.S.S.R. is located between Kirghiz Steppe on the north and Kyzl Kum (Red Desert) and Karakum Sands (Black Desert) on the south. The far eastern coast is indented by the Sea of Okhotsk.

Industries: The growing of almost every known variety of fruit, vegetables and grains, cotton, tobacco, livestock, potatoes, vineyards; caracul furs are exported from Uzbek, and much lumber is produced. Among the chief manufactured articles are textiles, machinery, iron and steel, munitions and military equipment, paper, cellulose, rubber, chemicals; fishing is a prominent industry, and shipbuilding yards are numerous. The principal minerals include coal, iron ore, petroleum, copper, gold, silver, manganese, zinc, lead, graphite, sulphur, vanadium, tin, and uranium.

Interesting Features: The Kremlin,

former palace of the czar at Moscow; the Hermitage Museum and the Palace of Count Stroganoff at Leningrad; the Kiev-Perchersky Monastery (now a museum) at Kiev; Church of St. Nicholas (erected in 1600) at Panilovo; the Church of the Ascension, built in 1532 at Kolomenskoie; ownership by the state of all industry and farming; the right to vote at the age of 18; 55,000 miles of railroads; highly developed inland waterways.

History: Long before the Christian era, Russia was inhabited by the Scythians and Sarmathians, and the Greeks established colonies on the northern coast of the Black Sea. In the 6th century A.D. the Slavs occupied a large part of the country, but were conquered by the Scandinavians who founded a permanent government at Novgorod under the rule of Rurik. Russia was invaded and dominated by the Mongols from the early 13th century until 1480, when their power was broken by Ivan III. Ivan IV was the first Russian monarch to assume the title of czar. Peter the Great founded St. Petersburg (now Leningrad) in 1703, and enlarged the empire by conquests which were continued during the reign of Catherine II. Napoleon's campaign against Alexander I, who ruled from 1801 to 1825, ended in disaster for the French forces after they had burned Moscow. Alexander II emancipated the serfs in 1861, and sold Alaska to the United States in 1867. Russia was defeated in a war with Japan lasting from 1904 until 1905; a revolution in 1904-06 resulted in the election of the Duma (a parliament) which held its first legislative session in 1906. Entering the First World War on the side of the Allies in 1914, Russia suffered numerous defeats; Nicholas I was forced to abdicate in 1917, and he as well as his family were killed. A provisional government under Prince Lvov was overthrown by a Bolshevik revolution un-

der the leadership of Lenin. A separate peace with the Central Powers was signed in 1918, and a Communist dictatorship—the Union of Soviet Socialist Republics—was organized. The Treaty of Riga ended a war with Poland in 1920. After the death of Lenin in 1924, Stalin became the national leader. He instituted the first Five Year Plan in 1928 for Russian improvement. The U.S.S.R. was invaded by Germany and Rumania in 1941. It was freed of all invaders in 1945.

Uruguay

Population: 2,146,545.

Area: 72,153 square miles.

Capital: Montevideo.

Leading Cities: Montevideo, Paysandu, Salto.

Geographic Features: Located in the southeastern part of South America, Uruguay lies south of Brazil and east of Argentina. The principal mountain ranges are the Cuchilla Grande and Cuchilla de Haedo, the highest elevation (about 2,000 feet) rising near Melo in the east. Among the important rivers are the Negro, which flows southwest across the country, the Uruguay, forming the western boundary, and the La Plata, separating Uruguay from Argentina in the south.

Industries: Agriculture, mainly grains, rice, citrus fruit, olives, linseed, tobacco, sheep and cattle; manufacturing, mainly textiles, meat-packing plants. Wine, wool, and hides are exported. The major minerals are gold, silver, lead, copper, manganese, lignite coal.

Interesting Features: The legislative palace and the university at Montevideo; about 1,700 miles of railway; a healthful climate due to the uniform temperature.

History: Uruguay was first inhabited mainly by Charrua Indians. Juan Diaz de Solis explored the estuary of the La Plata in 1515, and the first white

settlement was founded by Spaniards in 1624 at Santo Domingo de Soriano. Annexed by Brazil from 1820 until 1825, Uruguay was liberated by a revolt under the leadership of Juan Antonio Levalleja, and was constituted as an independent republic in 1830. In later years numerous civil wars were fought between two political factions, the Colorados and Blancos. Uruguay ended relations with Germany during the First World War, and again with the Axis during the Second World War.

Vatican City

Population: 1,025.

Area: .16 square miles (108.7 acres).

Geographic Features: Located near Rome in western Italy, Vatican City lies southeast of the Lake of Bracciano and east of the Tiber River.

General Features: Vatican City is the smallest independent state in the world, including within its boundaries St. Peter's Cathedral, the Vatican Palace and Museum, the gardens of the Vatican, and various buildings. The ruling Pope is the sovereign of the state.

History: The sovereignty of the Popes extended for many centuries over the Papal States (about 16,000 square miles) in central Italy, but in 1871 was limited to the palaces of the Vatican, the villa of Castel Gandolfo, and the Lateran in Rome. Under a treaty with Italy, signed in 1929, the Papal State of Vatican City was established.

Venezuela

Population: 3,839,747.

Area: 352,170 square miles.

Capital: Caracas.

Leading Cities: Caracas, Maracaibo, Valencia.

Geographic Features: Located in the northwestern part of South Amer-

ica, Venezuela is bounded on the north by the Caribbean Sea, on the south by Brazil, and on the west by Colombia. The principal mountain ranges include the Merida in the western region, the Maritime Andes or Caribbean Mountains in the north, and the Serra Pacaraima near the Brazilian border. Among the most important rivers are the Orinoco, which traverses the country and forms part of the western boundary, and the Caroni and Caura in the east. Lake Maracaibo lies in the northwest.

Industries: Mainly agriculture—coffee, cacao, tonka beans, cereals, rubber; many cattle are raised, and pearls are found on the coast. The minerals include gold, copper, petroleum, salt, coal, diamonds, tin, iron ore, asbestos, mica, asphalt, lead.

Interesting Features: Trans-Andean highway from Caracas to San Cristobal, a concrete road (25 miles in length) connecting La Guaira and Caracas; about 670 miles of railway.

History: Originally peopled by warlike Indians, Venezuela was visited by Columbus in 1498, and the first white settlement was founded by Spaniards at Coro in 1527. Venezuela declared its independence from Spain in 1811. A republican constitution was promulgated the same year, but it was not until 1823 when, under Simon Bolivar, royalist forces were driven out. The country was a part of Colombia from 1821 until 1831, when an independent republic was constituted with Jose Antonio Paez as the first president. Numerous civil wars and revolutions marked the later history of Venezuela, with the Liberals (Amarillos) and Conservatives (Azules) contending for power. A boundary dispute with British Guiana was not settled until 1899. Under Juan Vicente Gomez, who was elected first in 1908 and governed Venezuela for many years, the Maracaibo oil fields were developed and financial conditions were improved.

The government sided with the Allies in the Second World War.

Yugoslavia

Population: Estimated 16,200,000.

Area: 95,558 square miles.

Capital: Belgrade.

Leading Cities: Belgrade, Zagreb (Agram), Subotica (Maria Theresiopol), Sarajevo, Novi Sad (Neusatz), Skoplje (Uskub), Ljubljana (Lai-bach), Nis, Bitolj (Monastir).

Geographic Features: Located in southern Europe, Yugoslavia is bounded on the west by Italy, the Adriatic Sea, and Albania, and on the south by Greece. The principal mountain ranges include the Julian Alps in the northwest where Mount Triglar rises 9,394 feet, and the Dinaric Alps along the Adriatic coast. Among the most important rivers are the Danube, which forms part of the boundary between Yugoslavia and Rumania in the east, the Sava and Drava in the north, the Drina in the central region, and the Morava and Vardar in the south-east. Scutari Lake extends into Albania.

Industries: Mainly agriculture—grains, corn, grapes, tobacco, plums, Mediterranean fruit, dairying; many cattle, sheep, swine, and goats are raised, and lumber is made from the beech and oak forests. The chief minerals include copper, iron ore, coal, salt, chrome ore, lead, bauxite, gold, and zinc.

Interesting Features: Universities at Zagreb, Belgrade, Ljubljana, Subotica, and Skoplje; about 6,300 miles of railway; excellent docks at Sushak and Split.

History: Yugoslavia was formed in 1918 by combining Serbia and Montenegro with various provinces of Austria-Hungary: Croatia, Dalmatia, Slovenia, Herzegovina, Bosnia, and Vojvodina. Serbia and parts of the surrounding region were originally

peopled by the Romans, being included in the state of Moesia Superior. The Serbs first occupied the territory during the 7th century A.D., and four centuries later organized an independent kingdom that attained its greatest power under Stephen Dushan in the 14th century. In 1459 the country became a Turkish possession, and did not regain its independence until 1878. After the creation of Yugoslavia, a prolonged struggle ensued between two political factions—one advocating a unified central government, the other desiring local autonomy. Alexander I established a dictatorship in 1929 and was assassinated

in 1934. Yugoslavia was invaded by Germany and Hungary in 1941, and sections of territory were taken by Italy, Bulgaria and Albania. The country was completely liberated in 1945.

Number of Wars Fought by Various Nations (1480-1945)

Country	Wars	Country	Wars
Great Britain	78	Italy	25
France	71	Holland	23
Spain	64	Germany	23
Russia	61	Denmark	20
Austria	52	United States	13
Turkey	44	China	11
Sweden	26	Japan	9

RULERS OF ENGLAND

Name	Born	Ruled	Name	Born	Ruled
Anglo-Saxons			York		
1 Alfred the Great	849	871-901	31 Edward IV	1441	1461-1483
2 Edward the Elder	870	901-925	32 Edward V	1470	1483-1483
3 Athelstan	895	925-940	33 Richard III	1452	1483-1485
4 Edmund I	923	940-946	Tudor		
5 Edred	?	946-955	34 Henry VII	1457	1485-1509
6 Edwy the Fair	939	955-958	35 Henry VIII	1491	1509-1547
7 Edgar	943	958-975	38 Edward VI	1537	1547-1553
8 Edward the Martyr	961	975-979	37 Mary I	1516	1553-1558
9 Ethelred the Unready	968	979-1016	38 Elizabeth	1533	1558-1603
10 Edmund Ironside	989	1016-1016	Stuart		
Danes			39 James I	1566	1603-1625
11 Canute	995	1017-1035	40 Charles I	1600	1625-1649
12 Harold I, Harefoot	?	1035-1040	Commonwealth		
13 Hardicanute	1019	1040-1042	41 Oliver Cromwell	1599	1649-1658
Saxons			42 Richard Cromwell	1626	1658-1659
14 Edward the Confessor	1004	1042-1066	Stuarts Restored		
15 Harold II	1022	1066-1066	43 Charles II	1630	1680-1685
Normans			44 James II	1633	1685-1688
16 William the Conqueror	1027	1066-1087	45 William III and Mary II	1665	1689-1702
17 William Rufus	1056	1087-1100	46 Anne	1665	1702-1714
18 Henry I	1068	1100-1135	Hanover		
19 Stephen	1105	1135-1154	47 George I	1660	1714-1727
Plantagenets			48 George II	1683	1727-1760
20 Henry II	1133	1154-1189	49 George III	1738	1760-1820
21 Richard, Lionhearted	1157	1189-1199	50 George IV	1762	1820-1830
22 John Lackland	1166	1199-1216	51 William IV	1765	1830-1837
23 Henry III	1207	1216-1272	52 Victoria	1819	1837-1901
24 Edward I, Longshanks	1239	1272-1307	Saxe-Coburg		
25 Edward II	1284	1307-1327	53 Edward VII	1841	1901-1910
26 Edward III	1312	1327-1377	Windsor		
27 Richard II	1366	1377-1399	54 George V	1865	1910-1936
Lancaster			55 Edward VIII	1894	1936
28 Henry IV	1367	1399-1413	56 George VI	1895	1936-
29 Henry V	1387	1413-1422			
30 Henry VI	1421	1422-1461			

RULERS OF FRANCE

Family; Name	Born	Ruled	Family; Name	Born	Ruled
Carolingians			Bourbons		
1 Charlemagne	742	768-814	43 Henry IV of Navarre	1553	1589-1610
2 Louis Debonair	778	814-840	44 Louis XIII, the Just	1601	1610-1643
3 Charles the Bald	823	840-877	45 Louis XIV	1638	1643-1715
4 Louis II	846	877-879	46 Louis XV	1710	1715-1774
5 Louis III	863	879-882	47 Louis XVI	1754	1774-1792
6 Carloman	?	882-884	(Louis XVII)	1785	claimant
7 Charles the Gross	832	884-887	1st Republie		
8 Eudes	?	888-898	48 National Convention	—	1792-1795
9 Charles III	879	898-922	49 Directory	—	1795-1799
10 Robert	865	922-923	50 Consulate	—	1799-1804
11 Rodolph of Burgundy	?	923-936	1st Empire		
12 Louis IV	921	936-954	51 Napoleon I	1769	1804-1814
13 Lothair	941	954-986	Bourbons Restored		
14 Louis V	967	986-987	52 Louis XVIII	1755	1814-1824
Capets			53 Charles X	1757	1824-1830
15 Hugh Capet	938	987-996	Orleans		
16 Robert the Wise	970	996-1031	54 Louis Philippe	1773	1830-1848
17 Henry I	1008	1031-1060	2nd Republie		
18 Phillip I, the Fair	1052	1060-1108	55 Louis Napoleon	1808	1848-1852
19 Louis VI	1081	1108-1137	2nd Empire		
20 Louis VII	1121	1137-1180	56 Napoleon III	1808	1852-1871
21 Phillip II	1165	1180-1223	3rd Republie		
22 Louis the Lion	1187	1223-1226	57 Thiers, L. A.	1797	1871-1873
23 Saint Louis IX	1214	1226-1270	58 MacMahon, M. de	1808	1873-1879
24 Phillip III, Hardy	1245	1270-1285	59 Grevy, Paul	1807	1879-1887
25 Phillip IV, the Fair	1268	1285-1314	60 Sadi-Carnot, M.	1837	1887-1894
26 Louis X	1289	1314-1316	61 Casimir-Perier, Jean	1847	1894-1895
27 John I	1316	1316-1316	62 Faure, Francois	1841	1895-1899
28 Phillip V, the Tall	1294	1316-1322	63 Loubet, Emile	1838	1899-1906
29 Charles the Fair	1294	1322-1328	64 Fallieres, Armand	1841	1906-1913
Valois			65 Polncare, Raymond	1860	1913-1920
30 Phillip VI	1293	1328-1350	66 Deschanel, Paul	1856	1920-1920
31 John II, the Good	1319	1350-1364	67 Millerand, Alex.	1859	1920-1924
32 Charles V, the Wise	1337	1364-1380	68 Doumergue, Gaston	1863	1924-1931
33 Charles VI	1368	1380-1422	69 Doumer, Paul	1857	1931-1932
34 Charles VII	1403	1422-1461	70 Lebrun, Albert	1871	1932-1940
35 Louis XI	1423	1461-1483	71 De Gaulle, Charles	1890	1944-
36 Charles VIII	1470	1483-1498			
37 Louis XII	1462	1498-1515			
38 Francis I	1494	1515-1547			
39 Henry II	1519	1547-1559			
40 Francis II	1544	1559-1560			
41 Charles IX	1550	1560-1574			
42 Henry III	1551	1574-1689			

RULERS OF RUSSIA

The first dynasty to rule Russia was that of the Dukes of Kiev, who ruled from the 860's to 1157. The founder of the dynasty was Rurik, a Scandinavian chieftain.

The Grand Dukes of Vladimir ruled from 1157 to 1325. The line was founded by Andrei Bogoliubski and included Alexander Nevski.

The Grand Dukes of Moscow ruled from 1325 to 1462.

In 1462 Ivan III (the Great) became the first national sovereign and founded the line of the Czars of

Muscovy. They ruled until 1721.

In 1721, Peter I (the Great) took the title of emperor and became the first modern ruler of Russia. The reign of the Czars (emperors) of Russia lasted until 1917, when Nicholas II was deposed by the March revolution.

Alexander Kerensky became head of the Russian state in March 1917, ruling until November of that year, when he was succeeded by Nicolai Lenin. Lenin, head of the Communist Party, ruled Russia until 1924. In that year he was succeeded by Joseph Stalin.

MEMORABLE DATES OF HISTORY

Ancient Civilizations

B.C.

- 4241 Egyptian calendar established: "earliest dated event in history."
 4000 Flood, or Deluge, described in Bible.
 4000-2900 Period of Sumerian city-kingdoms.
 3400 Founding of royal dynasties of Egypt.
 3000-1800 Era of Egyptian pyramids.
 2870 First known settlement of Troy in Asia Minor.
 2400 Removal of Egyptian government from Memphis to Thebes.
 2245 Nineveh, capital of Assyrian Empire, founded by Ashur.
 2100 Emergence of Babylon. Period of Hammurabi.
 2000 Babylonia invaded by Hittites.
 Indo-Europeans settle in Iran.
 1913 Jerusalem emerges as a Hebrew city.
 1900 Greeks begin to settle in Greek peninsula.
 1800(?) Egypt conquered by the Hyksos, or Shepherd kings.
 1750-1729(?) Joseph sold into Egypt; followed by Jacob and his family.
 1600-1500 Cretan civilization highly developed.
 1582(?) Athens founded by Cecrops.
 1500-1200 Mycenaean age of Greece.
 Shang or Yin kingdom in China.
 1500 Peloponnesus settled by Dorian and Achæan Greeks.
 1440 Exodus from Egypt of Israelites led by Moses.
 1375-1350 Era of Amenhotep (Ikhnaton) and Tutankhamen in Egypt.
 1313(?) Thebes in Boeotia founded by Cadmus.
 1250-1183 Age of Homeric heroes.
 1192-1183 Siege of Troy.
 1100-722 Early Chou dynasty in China.
 1048 Jerusalem captured from Jebusites by David.
 1012 First temple built in Jerusalem by Solomon.
 1000 Era of Zoroaster, founder of Persian religion.
 Period of Vedic literature and religion in India.
 Kingdom of Israel established in Palestine by Hebrews.
 826 Carthage founded in North Africa by Dido.
 722-705 Ten tribes of Israel dispersed.
 674-665 Egypt conquered by Assyrians under Assurbanipal.
 660 Japanese empire established by Jimmu Tenno, legendary descendant of Sun Goddess.
 612 Nineveh captured and destroyed by Chaldeans and Medes.
 600 Hanging gardens built in Babylon in reign of Nebuchadnezzar.
 687 Nebuchadnezzar destroys Solomon's temple in Jerusalem and takes Hebrews into captivity in Babylon.
 563 Gautama Siddhartha, founder of Buddhism, born in India.
 551 Confucius, founder of Confucian religion, born in China.
 539 Cyrus, King of Persia, takes Babylon and establishes empire.

525	Egypt conquered by Cambyses, son of Cyrus.
521	Darius, King of Persia, rules from Hellespont to Indus.
500	Maya civilization born in Mexico and Central America.
492-479	Wars between Persians and Greeks.
359-336	Rise of Philip, King of Macedon.
336-323	Alexander, King of Macedon, conquers Persians; dominates Egypt; advances into Asia; and appoints satraps in India.
323	India revolts against Macedonian rule. Rise of Chandragupta in Punjab and Magadha.
264-227	Asoka's reign in India.
214	Great wall of China completed.

Greece and Rome

B.C.

776	First Olympiad in Greece. Greek calendar established.
753	Rome founded by Romulus.
735	Syracuse in Sicily settled by Greeks.
700	Homeric poems recorded.
630	Laws of Lycurgus in Sparta.
594	Laws of Solon in Athens.
580	Period of Aesop of Samos, fabulist.
509-264	First period of Roman supremacy in Italy.
490	Battle of Marathon.
480	Persian advance into Greece checked at Thermopylae by Leonidas and 300 Spartans.
	Battle of Salamis.
461-431	Golden age of Pericles, Phidias, and Sophocles.
431-404	Peloponnesian War between Athens and Sparta.
401	Retreat of Ten Thousand along Tigris to Black Sea.
399	Trial and death of Socrates.
399-347	Period of Plato and Aristotle.
387	Sack of Rome by Gauls.
334-323	Widespread Hellenization goes forward. Alexandria in North Africa rivals Carthage in commerce and culture.
325-304	Wars between Romans and Samnites.
309-307	War between Romans and Etruscans.
281	Pyrrhus, King of Epirus, invades Italy.
264-241	First Punic War.
220	Shi Hwang-ti becomes emperor of China.
218-201	Second Punic War. Hannibal crosses Alps.
149-146	Third Punic War.
146	Carthage and Corinth destroyed.
133	Class war in Rome. Tiberius Gracchus killed.
121	Caius Gracchus killed.
73	Revolt of slaves under Spartacus.
60	First triumvirate in Rome: Julius Caesar, Pompey, and Crassus.
58-51	Julius Caesar invades Gaul and Britain.
48	Julius Caesar defeats Pompey at Pharsalos.
45-19	Period of Vergil and Horace.
44	Julius Caesar assassinated.

- 43 Second triumvirate in Rome: Octavius, Antony, and Lepidus.
 31 Battle of Actium; Antony defeated by Octavius Caesar, who
 crushes Queen Cleopatra and makes Egypt a Roman province.
 27 Augustus Caesar becomes emperor (to 14 A.D.).
 4 Generally accepted date of birth of Jesus of Nazareth.

The Christian Era, Collapse of Rome, and Rise of Mohammedanism

- A.D.
 30(?) Jesus of Nazareth crucified.
 61 Queen Boadicca massacres Roman garrison in Britain, and later
 in same year is herself defeated by Romans under Paulinus.
 64 Burning of Rome; first persecution of Christians under Emperor
 Nero. Among martyrs are said to have been apostles Peter
 and Paul.
 68 Suicide of Nero.
 69 Vespasian begins so-called Flavian dynasty.
 70 Jerusalem destroyed by Titus.
 79 Pompeii and Herculaneum destroyed by eruption of Mount
 Vesuvius.
 96 Nerva begins so-called dynasty of the Antonines.
 117 Hadrian becomes Roman emperor. Roman Empire at its greatest
 extent.
 161-180 Reign of Marcus Aurelius.
 220 End of Han dynasty. Beginning of 400 years of division in China.
 284 Diocletian becomes Roman emperor and persecutes Christians.
 306 Constantine becomes Roman emperor and is converted to
 Christianity.
 323 Constantine presides over Council of Nicaea; Nicene Creed
 formulated.
 330 Roman capital moved to Byzantium, henceforward to be known
 as Constantinople.
 361-363 Julian the Apostate attempts to substitute Mithraism for Christi-
 anity.
 378 Theodosius becomes emperor of East and West, and suppresses
 all religions excepting Christianity.
 395 Division of Roman Empire between Arcadius and Honorius.
 Revolt of Visigoths.
 406 Barbarian invasions of Gaul.
 Roman garrisons withdrawn from Britain.
 410 Sacking of Rome by Alaric the Goth. Death of Alaric.
 426 St. Augustine's *City of God* published.
 429 Vandals settling in southern Spain, Huns in Pannonia, Goths in
 Dalmatia, Visigoths and Suevi in Portugal and northern Spain.
 Anglo-Saxons invading Britain.
 429 Vandals under Genseric invade Africa.
 451 Attila, King of Huns, raids Gaul and is defeated by Franks and
 Romans at Troyes.
 455 Sacking of Rome by Vandals.
 460(?) St. Patrick begins conversion of Ireland to Roman Catholicism.

- 476 Odoacer, king of a group of Teutonic tribes, informs Constantinople that there is no emperor in the West.
End of Western Empire.
- 493 Theodoric the Ostrogoth becomes king of Italy.
- 527-565 Justinian becomes Byzantine emperor; codifies law and closes the Athenian schools.
- 529 St. Benedict founds monastery at Monte Cassino, Italy.
- 568 Lombards conquer northern Italy.
- 570 Mohammed born at Mecca, Arabia.
- 590-604 Era of Pope Gregory I.
- 618 Tang dynasty begins in China.
- 622 Hegira, or flight, of Mohammed to Medina in Arabia. Date marks beginning of Mohammedan calendar.
- 624-646 Saracens (Arab Mohammedans) conquer Persia, Syria, and Egypt.
- 711 Mohammedan army invades Spain from Africa.
- 732 Mohammedans defeated in battle at Tours by Franks under Charles Martel.
- 750 Mohammedan invaders establish Moorish kingdom in Spain.

Early Years of European Feudalism

- 768-814 Reign of Charlemagne, king of Franks and Holy Roman Emperor.
- 786-809 Haroun al Raschid rules as Abassid Caliph in Bagdad.
- 800 Charlemagne crowned emperor at Rome by Pope Leo III.
- 814 Louis the Pious succeeds Charlemagne.
- 843 Louis the Pious dies and Carolingian empire breaks up. Until 962 there was no succession of Holy Roman emperors.
- 850(?) Rurik (a Swede) founds principality of Novgorod in Russia.
- 852 Boris becomes first Christian king of Bulgaria.
- 874 Norsemen settle in Iceland and establish first parliament there.
- 910 Monastery of Cluny in France founded.
- 911 Rollo the Norseman settles in Normandy by agreement with Charles the Simple.
- 919 Henry the Fowler elected king of Germany.
- 936 Otto I becomes king of Germany.
- 940 Library of Alexandria burned by order of Caliph Omar.
- 962 Otto I crowned Holy Roman emperor in Rome.
- 982 Erik (the Red) Thorvaldson, father of Leif Ericson, discovers Greenland.
- 987 Hugh Capet becomes king of France. End of Carolingian line of French kings.
- 1000 Leif Ericson, of Iceland, sails with Norsemen and discovers a country that he calls Vinland (possibly Labrador or Newfoundland) on mainland of North America.
- 1016 Canute becomes king of England, Denmark, and Norway.
- 1066 Battle of Hastings. Conquest of England by William, Duke of Normandy.
- 1073 Monk Hildebrand becomes Pope Gregory VII (to 1085).

- 1075 Roman Emperor-elect Henry IV attempts to depose Pope Gregory, but is himself excommunicated.
- 1077 Henry IV does penance at Canossa.
- 1095 Pope Urban II at Clermont summons First Crusade.
- 1099 Godfrey of Bouillon captures Jerusalem.
- 1130 Revival of study of Roman law at Bologna.
- Gratian's *Decretum*, digest of canon law, in preparation.
- 1147-49 Second Crusade under Conrad III and Louis VII.
- 1177 Frederick Barbarossa, Holy Roman Emperor, acknowledges supremacy of the Pope (Alexander III) at Venice.
- 1187 Saladin, Sultan of Egypt, captures Jerusalem.
- 1189-92 Third Crusade under Frederick Barbarossa, Philip II, and Richard Coeur de Lion; Acre captured.
- 1194-1260 Building of Chartres cathedral.
- 1200 Founding of universities of Paris and of Oxford.
- 1200-26 Period of St. Francis of Assisi.
- 1202-04 Fourth Crusade under Count Baldwin of Flanders.
- 1204 Constantinople captured by Crusaders.
- 1206-27 Rise of Mongols under Genghis Khan.
- 1208 First Albigenian Crusade.
- 1212 Children's Crusade.

European States in the Making

- 1215 Magna Charta, English guaranty of civil rights, granted to barons by King John.
- 1228-29 Fifth Crusade under Frederick II.
- 1233 Inquisition established in Spain by Pope Gregory IX.
- 1248-54 Sixth Crusade under Louis IX (St. Louis).
- 1250-1274 Age of Thomas Aquinas, Roman Catholic theologian.
- 1259-92 Reign of Mongol emperor, Kublai Khan, at Peking (now Peiping), China.
- 1265-1300 Age of Dante Alighieri and Giotto.
- 1267-94 Period of Roger Bacon, prophet of experimental science.
- 1271 Marco Polo starts from Venice on his travels.
- 1273 Rudolph of Hapsburg elected Holy Roman emperor; founder of the House of Austria.
- 1280 Kublai Khan founds Yuan dynasty in China.
- 1295 First regular English parliament, composed of clergy, barons, and knights, presided over by the king, Edward I.
- 1309 Papal Court set up at Avignon, France, instead of at Rome.
- 1314 French Estates-General called, representing all classes.
- 1320-84 Period of John Wyclif and English church reform.
- 1337 Beginning of Hundred Years' War.
- 1346 Battle of Crécy.
- 1348 "Black Death" plague in Europe.
- 1350 Period of Petrarch and Boccaccio in Italian literature.
- 1350-51 First Statute of Laborers in England.
- 1356 Battle of Poitiers.
- 1368 Mongol (Yuan) dynasty falls and is succeeded by the Ming dynasty in China.

- 1369 Tamerlane assumes title of Great Khan.
 1378 The Great Schism: Urban VI in Rome, Clement VII in Avignon.
 1381 Peasant revolt in England; Wat Tyler murdered in presence of King Richard II.
 1385 Period of Geoffrey Chaucer and *Canterbury Tales*.
 1414-18 Council of Constance; schism healed.
 1415 John Huss burned at stake in Constance, Baden.
 Battle of Agincourt.
 1429 Joan of Arc leads royal French soldiers against city of Orléans, and drives out British.
 1431 Joan of Arc at age of 19 is burned at stake in Rouen.

Renaissance and Reformation

- 1445 Portuguese discover Cape Verde, extreme west coast of Africa.
 1446 First printed books (Coster in Haarlem).
 1447 Vatican library founded by Pope Nicholas V.
 1453 Constantinople, capital of Byzantine Empire, captured by Turks and made capital of Ottoman Empire.
 1455-85 Wars of Roses in England.
 1461-83 Reign of Louis XI in France.
 1469-92 Rule of Lorenzo de' Medici in Florence, Italy.
 1469 Ferdinand of Aragon marries Isabelle of Castile.
 1476 William Caxton inaugurates English printing in London, near Westminster Abbey.
 1481 Portuguese start African slave trade.
 1484 Bull issued by Pope Innocent VIII condemns witchcraft.
 1486 Bartholomew Diaz, Portuguese navigator, rounds Cape of Good Hope.
 1489-1527 Period of Machiavelli and Cesare Borgia.
 1491-1528 Period of Albrecht Dürer, German painter and engraver.
 1492 Christopher Columbus crosses Atlantic Ocean and discovers land later known as America.
 Rodrigo Borgia, Alexander VI (Spaniard), Pope (to 1503).
 Expulsion of Jews from Spain.
 1493-1543 Age of Copernicus and of new astronomical knowledge.
 1497 Americus Vesputius, Italian navigator after whom America is named, sails to America.
 John Cabot, Venetian navigator in service of England, discovers east coast of Canada.
 Leonardo da Vinci paints *Last Supper*.
 1498 Savonarola burned as heretic in Florence.
 Vasco da Gama, Portuguese navigator, sails round Cape of Good Hope to India.
 1499 Switzerland becomes independent republic.
 1500-20 Period of Raphael, Italian painter.
 1508 Expulsion of Moors from Spain.
 1508-12 Michelangelo paints ceiling of Sistine Chapel in Rome.
 1509-47 Reign of Henry VIII in England.

- 1510-53 Period of François Rabelais, French physician, satirist, and humorist.
- 1511 Erasmus' *In Praise of Folly* published.
- 1513 Ponce de Leon lands in Florida in search of fountain of youth.
Battle of Flodden Field in Northumberland county, England, where troops of Henry VIII defeat Scots under James IV and kill him.
Balboa discovers Pacific Ocean.
- 1515-47 Reign of Francis I in France.
- 1516 Sir Thomas More's *Utopia* published.
- 1517 Martin Luther propounds his 95 theses at Wittenberg.
Persecution of Protestants commences in France.
- 1519 Fernando Magellan, Portuguese navigator, circumnavigates globe.
- 1519-21 Conquest of Mexico by Cortez, who defeats Montezuma, emperor, and establishes kingdom.
- 1520-66 Suleiman the Magnificent, sultan, rules from Bagdad to Hungary.
- 1521 Luther is excommunicated by diet at Worms.
- 1524 Giovanni de Verrazzano, Florentine, explores coast of North America, discovers New York Bay, and sails up Hudson River.
- 1526 William Tyndale's translation of New Testament published in England.
- 1530 Augsburg Confession, embodying Luther's views, read before diet there.
Charles V, Holy Roman emperor, crowned by Pope.
Henry VIII begins his quarrel with Papacy.
Pizarro invades Peru.
- 1530-80 Golden age of Italian painting—Veronese, Tintoretto, Titian.
- 1532 Rise of Anabaptists.
- 1534 Luther's German translation of Bible published.
Ignatius Loyola founds Society of Jesus (Jesuits).
Act of Supremacy makes King head of Church of England; ends Papal power there.
Jacques Cartier, French navigator, explores St. Lawrence River.
- 1535 First English Bible translated and issued by Miles Coverdale.
Sir Thomas More executed.
- 1536 Tyndale convicted of heresy in Belgium and burned at stake.
- 1536-39 Monasteries closed in England.
- 1539 Hernando de Soto takes possession of Florida in name of Spain.
- 1540-42 Coronado (Spaniard) explores from Mexico what is now Arizona and New Mexico in search of legendary "Seven Cities of Cibola."
- 1541 John Calvin introduces Reformation into Geneva.
- 1542 Hernando de Soto discovers Mississippi River.
- 1545-63 Council of Trent in sessions in Austrian Tyrol condemns doctrines of Luther and Calvin.
- 1547 Ivan IV (the Terrible) takes title of Czar of Russia.
- 1553 Michael Servetus tried for heresy and committed to flames under Calvin's regime.

Monarchy in Europe

- 1553-58 Reign of Mary Tudor ("Bloody Mary") in England; 277 burned at stake.
- 1555 Bishops Ridley of London and Latimer of Worcester martyred in Oxford.
- 1556 Archbishop Cranmer of Canterbury burned at stake.
- 1556-98 Reign of Philip II in Spain.
- 1558-1603 Reign of Elizabeth in England.
- 1565 First town in United States founded at St. Augustine.
- 1567 Netherlands revolts against Spanish rule.
- 1571 Battle of Lepanto, between the Christian League and the Turks.
- 1572 Massacre of Huguenots on St. Bartholomew's Day in Paris, following marriage of Henry of Navarre and Margaret of Valois.
- 1579 Sir Francis Drake explores coast of California.
- 1583 Expedition organized by Sir Walter Raleigh reaches Virginia.
- 1587 Execution of Mary, Queen of Scots.
- 1588 Spanish Armada defeated by the British.
Montaigne's essays published.
- 1589 Edmund Spenser's *Faerie Queene* published.
- 1590-1616 Golden age of English drama—Shakespeare, Marlowe, Beaumont and Fletcher.
- 1598 Edict of Nantes gives religious toleration to Huguenots.
First French attempt at colonization in Nova Scotia.
- 1600 Giordano Bruno burned at stake in Rome.
British East India Company chartered.
- 1600-05 Period of Boris Godunov, Czar of Russia.
- 1602 Capt. Bartholomew Gosnold, of Falmouth, England (first known white man to set foot in New England), lands at South Dartmouth, near New Bedford, Mass.
- 1603 Crowns of England and Scotland joined under James VI of Scotland, who becomes James I of England.
Shakespeare's *Hamlet* acted for first time.
- 1604 First French companies chartered for Eastern trade.
- 1605 Gunpowder plot by Guy Fawkes to blow up British Parliament discovered.
- 1606-07 Dutch defeats of Spanish-Portuguese at Malacca and Gibraltar open seas to Dutch commerce and colonization.
- 1607 Jamestown, Va., settled by Englishmen under Capt. John Smith.
- 1609 Henry Hudson in *Half Moon* sails up Hudson River.
Samuel Champlain (Frenchman) discovers Lake Champlain.
- 1611 King James version of Bible published.
- 1617 New Jersey first settled at Bergen.
- 1618 Thirty Years' War between Catholics and Protestants begins in Germany (Bohemia).
Sir Walter Raleigh beheaded in London.
- 1619 First representative assembly in America convenes at Jamestown, Va.
Slavery introduced into American colonies when 20 African Negroes are landed from Dutch ship at Jamestown.

- 1620 Pilgrims arrive at Provincetown, Mass., on *Mayflower* and found New Plymouth.
New Hampshire first settled at Dover.
- 1620-29 Period of Rembrandt, Frans Hals, and other great Dutch painters.
- 1624 The ship *New Netherland* arrives at what is now New York City and sails up Hudson to Albany.
- 1624-42 Cardinal Richelieu in power in France.
- 1625 Maine first settled at Pemaquid Point.
- 1626 Peter Minuit buys Manhattan Island from Indians.
- 1629 Charles I of England begins his 11-year rule without Parliament.
- 1630 Boston founded.
- 1631 Gustavus Adolphus of Sweden invades Germany.
- 1632-54 Reign of Christina in Sweden.
- 1634 Maryland first settled at St. Mary's.
- 1636 Rhode Island first settled at Providence.
Connecticut first settled at Hartford.
- 1638 Delaware first settled at Wilmington.
War with Pequot Indians.
- 1642-1715 Reign of Louis XIV, "Sun King," in France.
Period of Molière, Racine, Corneille, and other great French dramatists.
- 1644 Manchus end Ming dynasty in China.
- 1648 Treaty of Westphalia ends Thirty Years' War.
- 1649 Charles I beheaded in London after trial for treason.
- 1649-53 Commonwealth established by Oliver Cromwell in England.
- 1651 Thomas Hobbes' *Leviathan* published.
- 1652-77 Period of Baruch Spinoza, Dutch philosopher.
- 1658 Oliver Cromwell dies.
- 1659-1758 Period of Increase and Cotton Mather and of Jonathan Edwards in New England.
- 1660 Restoration of monarchy in England; Charles II becomes king.
- 1663 North Carolina first settled near Albemarle Sound.
South Carolina first settled near Charleston.
- 1664 New Amsterdam surrendered by Dutch to British; becomes New York.
- 1665 Great Plague in London followed by great conflagration: fire destroys 13,200 houses and 89 churches.
- 1667 Milton's *Paradise Lost* published.
- 1673 Marquette and Joliet explore Mississippi River.
- 1675 War with "King Philip," Indian chief, in New England.
- 1676 Nathaniel Bacon's rebellion in Virginia.
- 1682 La Salle claims Louisiana territory for France.
Pennsylvania first settled at Philadelphia.
- 1687 Sir Isaac Newton's *Principia* published; birth of modern physics.
- 1688 "Glorious Revolution" of 1688 installs William and Mary as rulers of England (until 1702).
- 1690 Battle of Boyne in Ireland.
- 1691 First post office organized in United States under royal patent granted to Thomas Neale.

- 1692 "Witchcraft delusion" at Salem, Mass.; 16 women and 5 men hanged.
- 1696-1725 Reign of Peter the Great in Russia.
- 1701 Capt. William Kidd, American shipmaster, and 9 of his men hanged in London for piracy.
- 1701-14 War of Spanish Succession.
- 1704 Gibraltar taken by English from Spain.
- Battle of Blenheim, where the French and Bavarians were defeated by the English and Austrians.
- 1705-50 Period of Bach and Handel, German composers.
- 1712 Slave insurrection in New York City quelled.
- 1713 Peace of Utrecht among Great Britain, France, and the allies.
- 1715 Louis XV becomes king of France.

Colonization and the Beginnings of Industrial Era

- 1720 Colonial trading plan, known as "Mississippi scheme" and organized by Scotch banker, John Law, fails and leads to panic; Law escapes to Italy.
- 1727 Last legal trial for witchcraft in Scotland.
- 1733 Georgia first settled at Savannah.
- Kay's flying shuttle patented.
- 1735 Freedom of press in United States established by acquittal by a jury, in New York City, of John Peter Zenger.
- 1740-86 Reign of Frederick the Great, King of Prussia.
- 1741 Empress Elizabeth of Russia begins her reign.
- Second slave insurrection in New York City quelled; 13 burned at the stake, 18 hanged, 71 transported.
- 1746 Battle of Culloden, Scotland, where English defeat Scots under Prince Charles, Stuart Pretender.
- 1752 Benjamin Franklin discovers electricity through experiment with kite.
- 1754-63 French and Indian War in America. George Washington leads company of Virginia Militia against French near Brownsville, Pa.; his first military experience.
- 1755 Samuel Johnson publishes his English dictionary.
- 1756 "Black Hole" of Calcutta is filled to suffocation with English prisoners by Indian rebels; only 23 survive out of 146.
- 1756-73 Britain and France struggle for mastery in America and India.
- France in alliance with Austria and Russia against Prussia and Britain; Seven Years' War.
- 1757 Battle of Plassey.
- 1759 British General Wolfe takes Quebec from the French.
- 1760 George III becomes king of Britain.
- Period of Rousseau and Voltaire in France.
- 1762 Accession of Catherine the Great of Russia (to 1796).
- 1763 Peace of Paris; Canada ceded to Britain.
- British establish dominance in India.
- 1764-1804 Period of Immanuel Kant, German philosopher.
- 1765 Hargreaves' spinning jenny invented.
- James Watt's steam engine constructed.

- 1767 Arkwright's water frame brought into use.
- 1779 Crompton invents spinning mule.
- 1785 Cartwright's power loom constructed.
- 1793 Eli Whitney invents cotton gin.

American and French Revolutions

- 1770 The "Boston Massacre," in which British soldiers fire at a mob, arousing American colonies.
- 1772 First partition of Poland by Russia, Prussia, and Austria.
- 1773 Tea destroyed in Boston Harbor—beginning of American War of Independence.
- 1774 First Continental Congress in session in Philadelphia.
Louis XVI begins reign in France.
- 1775 First blood of American Revolutionary War shed. Battles are fought at Concord and Lexington, Mass., Ticonderoga, N.Y., and Bunker Hill, Mass.
- 1776 Declaration of Independence signed in Philadelphia.
Nathan Hale executed by British as a spy.
Founding of San Francisco.
Adam Smith's *Wealth of Nations* published.
Goethe at Weimar, Germany.
Period of Mozart, Austrian composer.
- 1777 Stars-and-stripes flag adopted by Continental Congress.
Lafayette comes from France to offer his services to American Revolution.
Articles of Confederation ratified by 13 states.
British General Burgoyne surrenders at Saratoga.
- 1778 Washington and his troops at Valley Forge.
George Rogers Clark drives British out of Northwest.
France recognizes American independence.
- 1779 Naval battle off coast of England, in which *Bon Homme Richard*, under John Paul Jones, defeats British ship *Serapis*.
- 1780 Bank of Philadelphia chartered (first in United States).
No-Popery riots in London under lead of Lord George Gordon.
Major André hanged as a British spy at Tappan, N.Y.
- 1781 Lord Cornwallis and British army surrender at Yorktown, Va., ending war.
- 1783 American army demobilized; Washington bids his troops farewell in New York City.
- 1784 First successful daily paper in United States published in Philadelphia.
- 1786 Robert Burns, Scottish poet, publishes first book of poems.
- 1787 U.S. Constitution drawn up and ratified at convention of delegates from states in Philadelphia.
Shays' rebellion in Massachusetts.
- 1788 Warren Hastings, Governor General of India, put on trial in London.
Australia settled by British at Port Jackson.
- 1789 First Federal Congress of the United States in New York City.

- 1789 Washington inaugurated as President in Federal Hall, New York City.
French Estates-General assemble in Paris—beginning of French Revolution. Storming of Bastille.
- 1791 King Louis XVI and his family arrested.
Anthracite coal discovered in Carbon County, Pa.
- 1792 Revolutionary tribunal set up in Paris; National Convention opened and Republic proclaimed.
U.S. Congress establishes mint in Philadelphia.
- 1793 Louis XVI and Marie Antoinette of France beheaded.
Reign of terror starts in France.
Marat stabbed by Charlotte Corday.
Second partition of Poland by Russia, Prussia, and Austria.
- 1794 French revolutionary leaders, Danton and Robespierre, guillotined.
Whiskey insurrection in western Pennsylvania.
- 1795 Triple Alliance formed by Britain, Russia, and Austria.
Russia, Prussia, and Austria join in third partition of Poland.
Directory formed in Paris. Napoleon Bonaparte suppresses a revolt and goes to Italy as commander-in-chief of French army.
Educational reforms initiated by Froebel (German) and Pestalozzi (Swiss).
Period of G.W.F. Hegel, German philosopher.
- 1796 Vaccination discovered by Jenner.
- 1797 First U.S. frigates launched at Baltimore, Boston, and Philadelphia.
- 1798 Napoleon goes to Egypt. Battle of the Nile.
Publication of Malthus' *Essay on the Principle of Population*.
- 1799 Napoleon becomes First Consul of France.

Nineteenth and Early Twentieth Centuries

- 1800 American Congress meets in Washington, D.C., for first time.
Napoleon campaigns against Austria. Battles of Marengo and Hohenlinden.
Legislative union of Great Britain and Ireland.
- 1800-30 Golden Age of German and Austrian music—Beethoven, Schubert, Schumann, Mendelssohn.
- 1802 U.S. Military Academy at West Point established.
- 1803 England and France renew war.
Irish leader Robert Emmet convicted of treason, executed in Dublin.
Purchase of Louisiana from France negotiated by President Thomas Jefferson.
- 1804 Napoleon becomes emperor.
Suppression of Barbary pirates by American warships.
Vice President Aaron Burr kills Alexander Hamilton in a duel at Weehawken, N.J.
- 1805 Battle of Trafalgar; death of Nelson.
Battles of Ulm and Austerlitz.

- 1806 Dissolution of Holy Roman Empire.
- 1807 Robert Fulton's steamboat inaugurates steam navigation.
- 1807 Battles of Eylau and Friedland, and Treaty of Tilsit.
- 1807-13 Peninsular War, fought by Napoleon against Spain and Portugal, who were aided by the British.
- 1810-25 Period of Byron, Shelley, and Keats.
- 1812 Napoleon's retreat from Moscow.
- 1812-15 Second U.S. war with Britain.
- Oliver Hazard Perry wins naval victory on Lake Erie.
- British troops invade District of Columbia, burn Capitol and Congressional Library, and take possession of White House.
- Gen. Andrew Jackson defeats British at New Orleans.
- 1813 Bolivar leads war of independence in Venezuela.
- 1814-15 Congress of Vienna met and restored Europe to pre-1789 status.
- 1815 Napoleon returns from Elba; is defeated at Waterloo; and is exiled on St. Helena, an island in the south Atlantic Ocean.
- Holy Alliance formed by Russia, Austria, and Prussia; later joined by England and France.
- 1819 First American steamboat, *Savannah*, crosses Atlantic.
- 1820 First Factory Act passed in England through efforts of Robert Owen.
- Congress passes Henry Clay's Missouri Compromise bill.
- 1821 Greeks revolt against Turkish rule.
- 1822 Revolution in Portugal.
- Brazil proclaims her independence; Dom Pedro crowned emperor.
- 1823 Monroe Doctrine proclaimed.
- 1825 Trade unions allowed in England.
- Eric Canal between Buffalo and New York City opened.
- 1827 Slavery abolished in New York State by legislature.
- U.S. protective tariff laws denounced in Southern states as invasion of state rights.
- 1829 Greece wins her independence.
- 1830 "July Revolution" in Paris. Louis Philippe ousts Charles X.
- Uprisings in central Italy.
- Mormon church organized by Joseph Smith in New York State; he and his brother Hyrum killed by a mob in Carthage, Ill.
- First English railway opened between Liverpool and Manchester.
- 1831 Mazzini founds "Young Italy" society.
- First train drawn in United States by steam locomotive between Albany and Schenectady.
- 1832 South Carolina legislature passes ordinance of nullification of tariff.
- First Reform Bill restores democratic character of British Parliament.
- 1833 British Parliament outlaws slavery in the Empire.
- 1835 Word "socialism" first used in Owenite publications.
- Fire in New York City ravages 17 blocks and destroys 674 buildings.
- Texas, which for a time had been merged with Coahuila as a Mexican state, proclaims independence.

- 1835 Garrison of Texans at Alamo plaza, San Antonio, besieged and butchered; Davy Crockett among victims.
Battle of San Jacinto, in which Gen. Sam Houston defeats Mexican Gen. Santa Anna.
- 1837 Queen Victoria begins reign.
- 1839 Belgium and kingdom of Netherlands separate.
- 1840 Queen Victoria marries Prince Albert of Saxe-Coburg-Gotha.
- 1843 First telegraph line in United States between Washington and Baltimore.
- 1845 U.S. Naval Academy in Annapolis opened.
Annexation of Texas by United States.
Golden age of American literature—Emerson, Thoreau, Hawthorne, Longfellow, Lowell, Poe.
- 1846 English abolish Corn Laws.
Settlement of Oregon boundary dispute.
- 1846–48 War between United States and Mexico.
- 1848 “February Revolution” establishing Second French Republic.
Italian revolt against Austrian and Papal domination.
Kossuth leads libertarian movement in Hungary.
Revolutionary ferment in Austria, Germany, Belgium, Poland, Denmark, and Ireland.
Karl Marx and Frederick Engels issue Communist Manifesto.
- 1849 Suppression of revolutionary movements in Italy.
Charles Dickens’ *David Copperfield* published.
- 1850 Compromise of 1850 in United States (on question of slavery).
Period of great Russian writers—Turgenev, Dostoevsky, Tolstoy.
Jenny Lind sings at Castle Garden, New York City.
Tennyson becomes poet laureate of England.
- 1851 Gold discovered in Australia.
- 1852 Louis Napoleon’s *coup d’état* and beginning of Second French Empire.
- 1853 Commodore Matthew C. Perry visits Japan and opens commercial relations between United States and Japan.
- 1855 Crimean War (England and France against Russia).
First Atlantic cable laid between Newfoundland and Ireland.
Walt Whitman’s *Leaves of Grass* published.
- 1857 Indian mutiny against British rule.
Dred Scott decision of U.S. Supreme Court.
- 1858 East India Company dissolved; government of India transferred to British crown.
- 1859 John Brown’s raid on Harper’s Ferry, Va.; Brown is hanged at Charlestown, Va.
First petroleum well opened at Titusville, Pa.
Franco-Austrian War. Battles of Magenta and Solferino.
Charles Darwin’s *Origin of Species* published.
- 1859–61 War of Italian liberation. Formation of kingdom of Italy. Victor Emmanuel first king.
- 1860 First Pony Express between Sacramento, Calif., and St. Joseph, Mo.
South Carolina secedes from Union.
- 1861 Emancipation of Russian serfs by Czar Alexander II.

- 1861 Southern Confederacy elects Jefferson Davis president and Alexander H. Stephens vice-president.
Fort Sumter fired on—beginning of Civil War.
President Abraham Lincoln calls for volunteers.
Battle of Bull Run.
McClellan given command of Union army.
- 1862 Naval battle between *Monitor* and *Merrimac*.
Admiral David G. Farragut captures New Orleans.
Battles of Antietam and Fredericksburg.
Bismarck becomes chief Prussian minister.
International Working Men's Association organized in Germany by Karl Marx.
- 1863 Lincoln's Emancipation Proclamation.
Battles of Gettysburg, Vicksburg, Chickamauga, Lookout Mountain, Missionary Ridge.
Lincoln's address at Gettysburg.
- 1864 Grant made commander-in-chief of Union army.
Sherman's march to Atlanta; he captures Savannah.
Maximilian becomes emperor of Mexico.
- 1865 Gen. Robert E. Lee surrenders at Appomattox.
Lincoln assassinated by John Wilkes Booth.
Slavery abolished in United States by adoption of 13th amendment to Constitution.
- 1866 Ku Klux movement in South against Negro voters and "carpet-baggers" from North.
Second Atlantic cable laid.
Prussia and Italy attack Austria. Battle of Sadowa, in Austria, marks end of Austrian domination in German affairs.
- 1867 Alaska purchased from Russia.
Karl Marx's *Capital* published.
- 1867-68 Abolition of Shogunate and restoration of Mikado in Japan.
- 1868 Revolution in Spain.
President Andrew Johnson impeached, tried, and acquitted.
Period of Dmitri Ivanovich Mendelejeff; birth of modern chemistry.
- 1869 Financial "Black Friday" in New York; caused by gold corner.
Junction of Union Pacific and Central Pacific marks completion of first transcontinental railway.
Suez Canal opened.
- 1870 Franco-Prussian War. Ends at Sedan when Napoleon III surrenders to King William of Prussia.
Doctrine of Papal infallibility adopted by Ecumenical Council in Rome.
Troops of Victor Emmanuel II occupy Rome. Italian Parliament passes law allowing to Pope and his successors forever possession of Vatican, Lateran palaces, and Papal villa.
Period of Richard Wagner, German operatic composer.
- 1871 German Empire re-established.
Rise and suppression of Paris Commune.
Great fire in Chicago; 18,000 buildings destroyed.

- 1873 Panic in New York City begins with bank failures. Stock Exchange closed for 10 days.
- 1874 "Boss" W. M. Tweed, Tammany leader in New York City, convicted of fraud and sentenced to 12 years in prison.
- 1875 Period of Friedrich W. Nietzsche, German philosopher.
- 1876 Centennial Exhibition in Philadelphia.
Battle of Little Horn in Montana in Sioux Indian War; Custer and 276 cavalymen killed.
- 1877 Russo-Turkish War. Treaty of San Stefano.
Queen Victoria becomes empress of India.
- 1878 Treaty of Berlin inaugurates 36 years of armed peace in western Europe.
- 1879 Henry George's *Progress and Poverty* published.
F. W. Woolworth opens first five-and-ten-cent store—in Utica, N.Y.
- 1880 Period of Thomas A. Edison and of practical applications of electricity.
Period of Monet, Manet, and French impressionist painters.
- 1881 Alexander II, Czar of Russia, assassinated in St. Petersburg by nihilists.
President James A. Garfield assassinated in Washington.
French establish control of Tunis in North Africa.
Battle of Majuba Hill. Transvaal freed.
American Federation of Labor organized.
- 1882 Panama Canal begun by the French.
Prof. Robert Koch announces in Berlin discovery of tuberculosis germ.
- 1883 Triple Alliance of Germany, Austria, and Italy (renewed 1887, 1891, and 1896).
Britain occupies Egypt.
- 1884 Financial panic in New York City.
- 1885 Gen. Charles G. ("Chinese") Gordon, British governor of the Sudan, is slain at Omdurman.
- 1886 Seven policemen are killed, 60 wounded, by bomb thrown from anarchist meeting in Haymarket, Chicago.
Statue of Liberty on Bedloe's Island, New York Harbor, unveiled in presence of 1,000,000 people.
Gladstone's first Irish Home Rule Bill.
- 1887 Four Chicago anarchists (August Spies, Adolf Fischer, George Engel, and Albert R. Parsons), convicted by a jury, are hanged in connection with Haymarket explosion.
- 1888 Great blizzard in New York City and in eastern part of United States.
Johnstown, Pa., flood; 2,209 lives lost.
Eiffel Tower opened in Paris.
First Pan-American conference in Washington.
- 1889 Second International Working Men's Association organized in Paris.
- 1890 Congress passes Sherman Anti-Trust Law.
Ellis Island in New York Harbor opened as immigration depot.

- 1890 Period of Gounod (French) and Verdi (Italian), operatic composers.
- 1892 Conflict between Pinkerton guards and strikers in Carnegie steel mills at Homestead, Pa., results in death of 7 guards and 11 strikers. Alexander Berkman, anarchist, tries to assassinate Henry C. Frick, manager of mills, and is imprisoned.
Louis Pasteur, French bio-chemist, honored.
- 1893 World's Fair (Columbian Exposition) opens in Chicago.
- 1894 Chinese-Japanese War.
Jacob S. Coxey leads 20,000 unemployed into Washington.
President Cleveland sends Federal troops to Chicago to police strike of Pullman Car manufactory workers led by Eugene V. Debs. Debs is imprisoned.
Captain Alfred Dreyfus degraded in France.
- 1895 Cuban Revolution against Spanish rule begins.
X-rays discovered by Wilhelm Konrad Roentgen, German physicist.
Queen of Korea assassinated in royal palace.
Thomas A. Edison invents phonograph.
- 1896 President Cleveland appoints Venezuela Boundary Commission. Italians defeated at Adowa in Ethiopia.
- 1897 Turkish-Greek War.
- 1898 U.S. battleship *Maine* blown up in harbor of Havana, Cuba—beginning of Spanish-American War.
Admiral Dewey destroys Spanish fleet in Manila Bay, Philippine Islands.
Admiral Cervera's Spanish fleet in Cuban waters destroyed.
War ends; peace treaty signed in Paris; United States acquires Philippines and Puerto Rico.
British troops under General Kitchener avenge death of Gordon by defeating Mohammed Ahmed in North Africa and ending his rule.
Radium discovered by Pierre Curie, Madame Curie, and G. Bemont.
- 1899 Universal Peace Conference at The Hague called by Czar Nicholas II of Russia.
South African War begins between British and Boers.
W. H. Taft becomes first civil governor of Philippines.
- 1900 Humbert, king of Italy, assassinated by anarchist.
Boxer insurrection in China; siege of legations at Peking.
Dr. Walter Reed and associates start a campaign to wipe out yellow fever.
Rodin acclaimed greatest modern sculptor.
Period of Cézanne and French post-impressionist painters.
- 1901 Northern Pacific Railway stock corner and panic.
Pan-American Exposition at Buffalo.
President McKinley assassinated by anarchist.
Marconi sends wireless message across Atlantic.
- 1902 St. Pierre, Martinique, overwhelmed by eruption of Mt. Pelée; about 30,000 lives lost.

- 1902 Pennsylvania coal strike of 145,000 anthracite miners settled by commission appointed by President Theodore Roosevelt.
Cuban Republic inaugurated.
First International Arbitration Court opened at The Hague.
- 1903 Jews massacred at Kishinev, Russia; 47 slain, several hundred wounded.
King Alexander of Serbia and Queen Draga assassinated by army officers in Belgrade.
First successful airplane flight by the Wright brothers at Kitty Hawk, N.C.
- 1904 Russo-Japanese War begins. Port Arthur surrendered to Japanese.
United States occupies Panama Canal Zone.
- 1905 President Theodore Roosevelt acts as arbitrator in Russo-Japanese War; peace treaty signed at Portsmouth, N.H.
Duma, first Russian national parliament, organized.
Norwegian Storting and Swedish Parliament dissolve union of two countries.
- 1906 San Francisco earthquake and conflagration; 452 lives lost, property loss \$350,000,000.
Algeciras Congress and strengthening of French control in Morocco.
Capt. Alfred Dreyfus released from imprisonment on Devil's Island, vindicated, and restored to his rank.
- 1907 Confederation of South Africa established.
Carr Nation makes first ax raids on saloons in Kansas.
- 1908 Austria annexes Bosnia and Herzegovina.
- 1909 Robert E. Peary discovers North Pole.
Louis Bleriot flies across English Channel.
Henry Ford begins large-scale manufacture of Model-T automobiles.
Francisco Ferrer, Spanish founder of Modern Schools, executed in Barcelona.
- 1910 Los Angeles (Calif.) *Times* dynamited; 21 killed.
- 1911 Mexican Revolution. President Porfirio Diaz exiled in Europe.
U.S. Supreme Court orders Standard Oil combine dissolved.
Italy makes war on Turkey and seizes Tripoli.
Morocco crisis strengthens French hold on region.
Triangle shirt waist factory fire in New York City; 145 killed.
Flood in Yangtze River; 100,000 drowned.
C. P. Rogers makes first transcontinental flight in airplane from New York City to Pasadena, Calif.
- 1912 China becomes republic; Yuan Shi Kai elected president.
War in Balkans against Turkey by Montenegro, Bulgaria, Serbia, and Greece.
Steamship *Titanic* wrecked, on maiden trip from Southampton for New York, by iceberg off Newfoundland coast; 1,517 lost.
- 1913 Peace Palace at The Hague dedicated.
President F. I. Madero of Mexico assassinated.
King George of Greece assassinated.

First World War

- 1914 Archduke Ferdinand of Austria and wife assassinated in Sarajevo, Bosnia, by a Serb student—beginning of First World War.
Austria declares war on Serbia.
Germany invades France; Russian troops invade Germany.
Japan declares war on Germany.
Germany occupies Brussels and Antwerp.
Russians defeated by Germans at Tannenberg in East Prussia.
Germans checked at first battle of Marne.
U.S. Marines land at Vera Cruz, Mexico.
First ship passes through Panama Canal.
- 1915 First German air raid on England.
German official submarine blockade of Britain begins.
Allies checked by German use of poison gas.
Italy renounces treaty of Triple Alliance and declares war on Austria-Hungary.
Sinking of *Lusitania* by a German submarine with large loss of life.
Allied forces land at Salonica.
Nurse Edith Cavell shot in Brussels.
Panama-Pacific International Exposition opened in San Francisco.
- 1916 Beginning of Battle of Verdun.
Rise and suppression of Irish rebels, followed by execution of Patrick H. Pearse and other leaders; Sir Roger Casement hanged in London.
Naval battle of Jutland.
Sinking of British warship *Hampshire*, with Lord Kitchener aboard.
Battle of Somme.
David Lloyd George becomes British premier.
Peace negotiations begun by President Wilson.
Columbus, N.M., raided by Pancho Villa; Pershing enters Mexico to punish Villa.
Bomb on line of Preparedness Day parade in San Francisco kills 10; Thomas J. Mooney, Mrs. Mooney, Warren K. Billings, Israel Weinberg, and Edward D. Nolan arrested.
- 1917 Germany begins unrestricted submarine warfare.
U.S. breaks off diplomatic relations with Germany and declares war.
First American troops landed in France.
Russian Revolution; Provisional Government set up under Alexander Kerensky; Czar abdicates; Bolshevik *coup d'état* under Nicolai Lenin overthrows Provisional Government.
Armistice concluded between Russia and Central Powers.
Finland proclaims independence.
British occupy Bagdad.
Jerusalem captured by General Allenby.

- 1917 Eighteenth (Prohibition) Amendment to U.S. Constitution is submitted to states by Congress.
- 1918 President Wilson formulates his Fourteen Points of Peace. Peace treaty signed at Brest-Litovsk between Bolsheviks and Germany.
- Czar Nicholas, Empress Alexandra, and their three daughters and son are shot by Bolshevik orders in Ekaterinburg.
- Germans retreat across Marne.
- General Foch appointed commander-in-chief of Allied forces.
- Battles of Chateau Thierry, St. Mihiel, and Meuse-Argonne.
- German and Austrian governments appeal to President Wilson for an armistice.
- Armistice granted Turkey.
- Mutiny of German fleet in Kiel and Hamburg: A Socialist revolution occurs. Kaiser Wilhelm II abdicates and flees to Holland.
- Armistice and end of hostilities.

Between First and Second World Wars

- 1919 Peace Treaty signed in Versailles.
- Beginnings of fascism in Italy under leadership of Mussolini.
- Germany adopts Weimar constitution.
- Amritsar massacre in India; 379 killed and 1200 wounded.
- First non-stop air flight from Newfoundland to Ireland made by John Alcock and A. W. Brown.
- U.S. Senate rejects Treaty of Versailles, including plan for League of Nations.
- Third International, or Comintern, organized in Russia.
- Soviet Russia attacked on 21 fronts; Denikin and Yudenitch defeated; British withdraw from Archangel.
- German fleet scuttled at Scapa Flow.
- 1920 Eighteenth (Prohibition) Amendment to U.S. Constitution (ratified in 1919) becomes effective.
- First meeting of League of Nations in Geneva; Germany, Austria, Russia, and Turkey excluded; United States not represented. To November assembly 48 countries send delegates.
- Nicola Sacco and Bartolomeo Vanzetti, Italian anarchists, are arrested, charged with murder and robbery of shoe factory paymaster in South Braintree, Mass.
- Nineteenth Amendment to U.S. Constitution, giving suffrage to women, goes into effect.
- Koltchak is defeated by Bolsheviks and shot; Wrangel invades Russia from south and is driven off.
- Poland attacks Russia.
- 1921 President Harding signs joint resolution of Congress declaring peace with Germany and Austria.
- Limitation of Armaments Conference meets in Washington.
- 1922 Fascist march on Rome.
- Genoa economic conference. Rapallo treaty, in which Russia and Germany renounce reparations.

- 1922 Greek military collapse in Asia Minor.
Separation of southern Ireland from Great Britain. Outbreak of civil war in Ireland. Irish Free State is set up.
First airplane crossing of South Atlantic, by Portuguese aviators.
Twenty-six persons, including 21 non-union miners, killed at Herrin, Ill., in battle between strikers and strike breakers.
Widespread famine in Russia.
- 1923 Occupation of Ruhr by French, and monetary collapse in Germany.
Proclamation of Turkish Republic, Mustapha Kemel as president.
Ludendorff and Adolf Hitler in "Beer Hall Putsch" in Munich.
- 1924 Allies and Germany accept Dawes Reparation Plan; Owen D. Young assumes duties as agent general of reparation payments.
French troops evacuate Ruhr.
First Labor Government in Britain.
Death of Lenin, Bolshevik leader. Is succeeded by Joseph Stalin.
Matteotti, Italian socialist parliamentary leader, murdered by fascists.
- 1925 Locarno conference and treaties.
Hindenburg elected president of Germany.
First woman governor of a state in United States is Mrs. Miriam A. Ferguson, installed as governor of Texas.
John T. Scopes, of Dayton, Tenn., is fined \$100 for having taught evolution in local high school; Clarence Darrow and William Jennings Bryan fight out the issue in court.
French attacked in Morocco by Abd-el-Krim and in Syria by Druses.
Riza Khan Pahlevi deposes shah of Persia and himself becomes shah.
- 1926 General strike in Britain arising out of coal lockout.
Germany admitted to League of Nations.
Tropical hurricane sweeps Cuba, Florida, Alabama, and Mississippi, killing more than 1000.
- 1927 Six hundred U.S. Marines occupy Nicaragua.
Civil war in China.
Floods in lower Mississippi River inundate 20,000 square miles.
Charles A. Lindbergh crosses the Atlantic in monoplane in the first non-stop flight by air from New York to Paris.
Sacco and Vanzetti executed in Boston.
- 1928 Frank B. Kellogg, President Coolidge's secretary of state, originates series of treaties by which all great powers of world renounce war.
Russia starts first Five Year Plan. Trotsky, Kameneff, Zinoviev, and Radek exiled by Soviets from White Russia.
First talking picture demonstrated in New York City.
Dirigible *Graf Zeppelin* under Capt. Hugo Eckener crosses Atlantic.
- 1929 Second Labor Government in England.
Papal State is recreated under name of State of Vatican City.
Albert B. Fall, former Secretary of Interior, is convicted of accepting bribe in leasing of Elks Hills naval oil reserve.

- 1929 Sharp drop of prices of stocks and bonds precipitate Wall Street crash.
Richard E. Byrd discovers South Pole.
- 1930 Conference on naval reduction meets in London with trivial results.
National Socialist (Nazi) party appears in German Reichstag led by Adolf Hitler.
Foundation of Bank for International Settlements.
- 1930-31 Japanese occupation of Manchuria.
- 1931 Spain becomes republic; King Alfonso flees.
Economic depression sets in.
President Hoover proposes one-year moratorium on intergovernmental debts.
Britain suspends gold standard. Ramsay MacDonald is again Prime Minister, heading national government.
- 1932 Japanese marines land in Shanghai.
Lindbergh's baby is kidnapped from his home near Hopewell, N.J., and is later found dead in thicket.
Reparations conference meets in Lausanne, Switzerland.
Franklin D. Roosevelt elected U.S. President.
- 1933 Hitler becomes Chancellor of Germany.
German Reichstag building in Berlin destroyed by fire. "Burning of Books" by Nazis.
President Franklin D. Roosevelt institutes program to bring the country out of the depression. Closes all banks in U.S. for a short period. Signs act of Congress taking nation off gold standard. Congress passes National Industrial Recovery Act and Agricultural Adjustment Act, giving President control of industry and agriculture. Five hundred million dollars in relief funds are voted. A three-billion-dollar program of public works is begun.
Army revolt in Cuba causes President Machado to resign and flee.
Germany withdraws from League of Nations.
Adoption of 21st Amendment to U.S. Constitution repeals 18th (Prohibition) Amendment.
- 1934 Albert I, Belgian king, killed while mountain climbing near Namur.
U.S. Congress guarantees Philippine independence, effective 1945 or soon thereafter.
Argentine anti-war pact signed by United States and Cuba and 11 Central and South American states.
Hitler's "blood purge" of Nazi leaders in Germany.
Civil war in Austria between Social Democrats and government forces; Nazis in Vienna kill Chancellor Engelbert Dollfuss.
Italian and Ethiopian troops clash on disputed frontier of Italian Somaliland; Italy refuses arbitration and demands reparations and apology.
King Alexander II of Yugoslavia and French Foreign Minister Barthou assassinated in Marseilles by Macedonian terrorist.
Kirov, trusted associate of Stalin, assassinated in Moscow.

- 1935 Italy invades Ethiopia; bombs and occupies Adowa and other Ethiopian cities.
 Saar territory, taken from Germany by Versailles Treaty, votes to return to Germany.
 Hitler violates Versailles Treaty, begins expansion of German army.
 U.S. Congress passes \$4,880,000,000 works relief bill, creating Works Projects Administration.
 President Roosevelt signs social security bill.
 Economic sanctions attempted against Italy by 52 nation-members of League of Nations as protest against invasion of Ethiopia.
 National Industrial Recovery (NRA) program in United States is crippled by Supreme Court decision.
 Committee for Industrial Organization (C.I.O.), later Congress of Industrial Organizations, formed in Washington by John L. Lewis and other labor leaders.
- 1936 Emperor Haile Selassie flees from Addis Ababa; Premier Mussolini in Rome announces end of war, annexation of Ethiopia.
 Germany reoccupies Rhineland and denounces Locarno pact.
 Civil war breaks out in Spain between Loyalists and insurgent Nationalists under Gen. Francisco Franco; Loyalist government moves from Madrid to Valencia.
 King George V of England dies and is succeeded by his eldest son, who takes title of Edward VIII. He abdicates and is succeeded by his brother the Duke of York, who becomes George VI.
 Formation of Rome-Berlin axis. Japan and Germany sign anti-Comintern pact.
 U.S. Supreme Court decision upsets Agricultural Adjustment Act.
 Russia adopts new constitution and official name, "Union of Soviet Socialist Republics" (U.S.S.R.).
- 1937 Undeclared war between Japan and China. Japan bombs Tientsin; takes possession of Peiping; lands marines at Shanghai. Japanese shells sink U.S. gunboat *Panay* and American oil carriers on Yangtze River.
 Italy withdraws from League of Nations.
 Spanish insurgents shell Madrid; General Franco sets up one-party state; Italy and Germany come to Franco's aid; Loyalists form new government under Premier Juan Negrin.
 President Roosevelt's attempt to reorganize Supreme Court fails.
 Neville Chamberlain becomes Prime Minister of England.
 Former King Edward VIII, now Duke of Windsor, marries Mrs. Wallis Warfield in Monts, France.
 Irish Free State adopts new constitution and name, Eire.

Second World War

(See also CHRONOLOGY OF SECOND WORLD WAR)

1938

Germany invades and annexes Austria, and begins campaign to separate Sudeten territory from Czechoslovakia.

Hitler, Mussolini, Chamberlain, and Daladier participate in Munich conference which allows seizure of Czechoslovakian territory by Germany.

Further cessions of Czechoslovakian territory to Hungary and Poland are permitted.

Indignation mounts as new war is imminent.

Insurgent planes bombard Barcelona, and Franco's armies win new victories.

Chinese resistance under Gen. Chiang Kai-shek is steadily consolidated; Chinese troops win victory over Japanese invaders at Taierchwang.

Mexico nationalizes petroleum industry.

Italian Parliament dissolves, to be succeeded by Chamber of Fasces and Corporations.

King Carol of Rumania establishes Fascist Corporative Chamber; Codreanu and 13 other Iron Guard (Fascist) members are killed by prison guards.

✓ 1939

President Roosevelt appoints Myron C. Taylor as his personal representative to Vatican.

Pope Pius XI dies, and Cardinal Eugenio Pacelli is elected Pope (Pius XII).

New York World's Fair opens.

King George of England and Queen Elizabeth visit Canada and United States.

Loyalist Spanish government surrenders Barcelona to insurgents; Madrid surrenders; last 9 of 52 provincial capitals surrender. Franco and Nationalists announce total victory and end of war.

Germany invades Poland. Britain and France declare war on Germany.

Italy annexes Albania.

Thomas J. Mooney is pardoned by Gov. Culbert Olson of California after 23 years in prison.

Bomb explosion wrecks Munich beer hall shortly after Hitler leaves.

1940

Leon Trotsky, former revolutionary leader, is assassinated in Mexico City.

President Roosevelt sends Sumner Welles, Under-Secretary of State, to confer with rulers of Britain, France, Germany, and Italy, regarding the war situation.

President Roosevelt signs Selective Service Act. On October 29 first U.S. peacetime compulsory military service is inaugurated when Secretary of War Stimson, blindfolded, draws from glass bowl first of 16,313,240 cards for young men who have registered under the act.

1940

Franklin D. Roosevelt elected President of United States for third time—first President ever chosen for more than two 4-year periods.

In Rumania 64 former officials of exiled King Carol are shot to death by members of Iron Guard in revenge for killing of Iron Guard founder Codreanu and 13 of his followers.

President Roosevelt in address to Congress proclaims Four Freedoms.

1941

Lend-lease policy goes into effect. President Roosevelt submits \$17,485,000,000 budget to Congress, \$10,811,000,000 for defense. Russia is promised \$1,000,000,000 in lend-lease aid.

Seventeen-year-old Peter crowned King of Yugoslavia.

President Roosevelt orders immediate freezing of U.S. assets of Germany and Italy and all invaded or occupied European countries; orders all German consulates in United States closed.

U.S. Marines occupy Iceland on invitation from that country.

Atlantic Charter—joint United States-British statement—proclaimed after President Roosevelt and Prime Minister Winston Churchill have met at sea.

John L. Lewis calls strike in "captive" coal mines of seven largest steel companies in defiance of President Roosevelt. Later, strike is called off and government's Mediation Board undertakes to report on merits of controversy. President Roosevelt appeals to steel companies and union heads to submit their differences to arbitration or to postpone settlement until end of national emergency.

President Roosevelt protests to Emperor Hirohito against Japanese invasion of Indo-China and Thailand.

President Roosevelt and Secretary of State Hull receive special envoys Saburo Kurusu and Admiral Nomura for conference on Far Eastern situation.

Japan declares war against United States, Great Britain, Australia, Canada, New Zealand, and Union of South Africa, and, before declaration reaches Washington, attacks Hawaii (Pearl Harbor), Philippines, and other American possessions in Pacific.

U.S. Congress declares war against Japan.

Germany and Italy declare war against United States. U.S. Congress declares state of war exists between United States and Germany and United States and Italy.

1942

Twenty-six countries sign declaration of United Nations in Washington, pledging joint action in world-emergency.

President Roosevelt and British Prime Minister Churchill announce from White House unified control in Pacific area.

Peru and Ecuador sign agreement ending boundary dispute; agreement ratified in protocol signed by United States, Brazil, Argentina, and Chile.

In Black Sea 750 Jewish refugees are killed by explosion on steamer *Struma*.

Wilhelm II, former German Kaiser, dies in exile in Netherlands.

- 1942 Hitler given new authoritarian powers by unanimous vote of Reichstag.
- House concurrence sends to White House legislation increasing national debt limit from \$65,000,000,000 to \$125,000,000,000.
- Congress passes and President Roosevelt signs anti-inflation bill. Under this act the President is authorized to issue general order stabilizing prices, wages and salaries, affecting cost of living.
- Liquidation of Works Projects Administration is ordered by President Roosevelt.
- Congress passes bill lowering draft age to 18 years.
- Capt. Edward V. Rickenbacker and seven army men disappear in plane on flight from Oahu, Hawaii; one man dies, the rest are rescued three weeks later.
- Admiral Jean François Darlan takes over authority in French Africa. Later Darlan is assassinated. Gen. Henri Giraud is chosen as successor.
- 1943 President Roosevelt and Prime Minister Churchill attend 10-day conference in Casablanca, Morocco.
- Premier Mussolini takes over post of Italian foreign minister, held by Count Ciano since 1936.
- President Roosevelt signs legislation extending life of Lend-Lease Act and permits bill increasing debt limit to \$210,000,000,000.
- Venezuelan link in Pan American Highway is opened to traffic.
- President Roosevelt orders Solid Fuels Administrator Ickes to take over all bituminous and anthracite properties, following strike of coal miners.
- Prime Minister Churchill joins President Roosevelt in Washington for fifth war conference.
- President Roosevelt signs pay-as-you-go income tax bill.
- Trans-Canada Highway is opened to traffic from coast to coast.
- Race riots in Detroit cause 34 deaths with more than 700 injured and 1300 arrests.
- President Roosevelt creates new Office of Economic Warfare.
- King Victor Emmanuel of Italy announces resignation of Premier Mussolini and appointment of Pietro Badoglio as his successor.
- Mussolini is kidnapped from Allies by German paratroopers.
- In Algiers, French Committee of National Liberation announces appointment of Gen. Henri Giraud as commander-in-chief of all French forces and appointment of Gen. Charles de Gaulle as permanent chairman of new Committee of National Defense.
- Chicago's first subway opened.
- Conference of Foreign Secretaries of United States, Britain and Russia is held in Moscow; Cordell Hull makes his report at joint session of U.S. Congress.
- President Roosevelt, Prime Minister Churchill, and Generalissimo Chiang Kai-shek hold 5-day conference in Cairo.
- President Roosevelt, Prime Minister Churchill, and Marshal Stalin confer in Tcheran on war plans.

- 1943 U.S. Army, acting on order of President Roosevelt, seizes control of nation's railroads.
- 1944 President Roosevelt and Prime Minister Churchill with their military staffs hold second conference in Quebec.
 U.S. Congress passes bill repealing Chinese exclusion laws.
 President Roosevelt sets up War Refugee Board to rescue "persecuted minorities" from Germany.
 Gen. Charles de Gaulle visits Canada and United States and confers with President Roosevelt.
 International monetary conference at Bretton Woods, New Hampshire, is attended by Secretary of Treasury Morgenthau, Lord Keynes of England, and economic experts.
 Secretary of State Hull issues 17-point program of American foreign policy aimed at post-war world of international co-operation.
 Secretary Hull resigns and is succeeded by Edward R. Stettinius, Jr.
 Secretary of Navy Frank Knox dies and is succeeded by James Vincent Forrestal.
 Wendell Willkie withdraws from Presidential race; he dies suddenly on October 8.
 Manuel Quezon, president of Philippine Commonwealth, dies in United States and is succeeded by Sergio Osmena.
 Martin Dies, chairman of House Committee on Un-American Activities, retires from politics.
 Third International (Comintern) dissolved; Communist party of United States ends its existence as political party and becomes Communist Political Association.
 President Roosevelt orders Montgomery, Ward & Co., mail order house, to comply with order of National War Labor Board and directs C.I.O. union of employees to end its strike against Ward company. Chairman Sewell Avery of company challenges President Roosevelt's authority. U.S. troops take possession of Chicago headquarters of company and forcibly eject Avery.
 Dumbarton Oaks Conference in Washington. United States, Great Britain, Russia, and China announce decision to recommend creation of international security organization to be known as The United Nations.
 Franklin D. Roosevelt re-elected president of United States for fourth term.
- 1945 President Roosevelt is inaugurated for a fourth term. He confers with Prime Minister Churchill and Premier Stalin at Yalta in the Crimea. Shortly after his return, on April 12, he dies of a cerebral hemorrhage at his home in Warm Springs, Ga.
 Vice President Harry S. Truman is sworn in as President on April 12. In an address to Congress he pledges his support of the program laid down by the late President.
 The Inter-American Conference on Problems of War and Peace meets in Mexico City. Provision is made for continued struggle against fascism by the nations of the hemisphere. Plans are
- (through October)

made for a permanent inter-American organization which will meet periodically.

1945

The United Nations Security Conference meets in San Francisco with delegates from 46 nations. Before accepting in final form a charter for a world peace organization, the conference debates sharply the questions of the admission of Argentina and Poland, the veto powers of the large nations, and the problem of mandated territories. The organization formed at the conference is called the United Nations Organization. The charter provides for a Security Council of 5 permanent members—the United States, Great Britain, Russia, China, and France—and 6 others to be elected; and a General Assembly to which all members belong. (See page 211 for the text of the charter.)

Germany surrenders unconditionally to Allies.

New York becomes the first state to set up a permanent commission to eliminate discrimination in employment.

James F. Byrnes succeeds Edward R. Stettinius as Secretary of State. Stettinius is later named U.S. delegate to the United Nations Organization.

Native forces in Syria and Lebanon resist French demands for privileges. Street fighting occurs in Damascus and elsewhere. The French use planes and artillery against the natives. The British intervene and order the French troops back to their barracks.

The Nazis are reported to have killed 80 per cent of Germany's Jews. Only 150,000 survive.

The Communist Political Association convenes and votes to reconstitute itself as the Communist Party.

The Senate ratifies the United Nations Charter. Several days later the bill is signed by President Truman, thus making the United States the first nation to ratify the charter.

The first conference of the "Big Three"—the United States, Great Britain, and the Soviet Union—since the defeat of Germany is held in Potsdam, Germany. The conference agrees on a formula for reparations from Germany whereby each of the three powers is to fill its claims by taking goods and equipment from its own zone of occupation. Russia is awarded the ice-free port of Koenigsberg and the surrounding East Prussian territory. Poland is awarded the remainder of East Prussia and the city of Danzig. A council of the foreign ministers of the three conferring powers and China and France is established to prepare for the writing of the peace settlements. Agreement is reached on a program designed to strip Germany of its war-making powers, to smash cartels, and to abolish all German land, sea, and air forces.

As a result of the first general election held in Great Britain in nine years, the Labor Party obtains a majority of seats in the House of Commons for the first time in British history. Winston Churchill is succeeded as Prime Minister by Clement R. Attlee. The program of the Labor Party calls for nationalization of

1945

basic industry, extension of social security, and a large-scale program of rebuilding for Britain's bombed-out citizens.

The United Nations War Crimes Commission in London announces a pact establishing an International Military Tribunal to try major European Axis war criminals. The members of the commission are the United States, Great Britain, Russia, and France.

President Truman announces the termination of lend-lease aid to the Allies. Since the beginning of the lend-lease system in 1941 the United States had sent goods and materials to the Allies to the value of forty billion dollars and had received in return goods and materials valued at five billion dollars.

Following a conference in Paris on the status of Tangier, it is announced that Spanish control of the port is at an end and that it will be under the supervision of a provisional international regime. This marks the first participation by Russia in Mediterranean affairs since before the First World War.

Russia and China announce the signing of a treaty whereby Russia pledges to respect the sovereignty of China and pledges not to interfere in internal affairs. The two countries pledge mutual military aid for a 30-year period. In separate agreements Russia becomes joint owner and manager with China of the main railroads of Manchuria and is given joint use with China of Port Arthur as a naval base. The city of Dairen is declared a free port, with Russia obtaining the right to lease without cost half the port installations and equipment. China recognizes the independence of Outer Mongolia.

American airplanes drop atom bombs (first in history) on Japanese cities of Hiroshima and Nagasaki.

Russia enters war against Japan.

Japan surrenders unconditionally.

Two weeks after the surrender of Japan, the War Manpower Commission announces that two million persons have lost their jobs.

President Truman orders a 48-hour week in war plants, with time and a half pay for work over 40 hours.

Herbert H. Lehman, Director General of the United Nations Relief and Rehabilitation Agency, announces an expanded program of aid for 1946 of \$1,800,000,000. The United States' share of this sum will be \$1,350,000,000.

In the longest Presidential message to Congress since 1901, President Truman calls for, among other things: extension and liberalization of unemployment insurance to provide for recently discharged war workers, federal workers, and others; enactment of a full employment law; establishment of a permanent fair employment practices committee.

In conformity with the Potsdam agreement, the foreign ministers of the United States, Great Britain, the Soviet Union, France, and China meet in London to begin the writing of the peace treaty of the Second World War. No formal agreements are reached.

THE SECOND WORLD WAR

CHRONOLOGY

1938

September

Munich conference, in which Hitler, Mussolini, Chamberlain, and Daladier participate, allows seizure of Czechoslovak territory by Germany, Hungary, and Poland.

October

German troops cross German-Czechoslovak frontier and occupy Sudeten territory.

Hungarian troops occupy Czechoslovak territory lying along northern Hungarian border.

Polish troops occupy Czechoslovak territory near Polish border.

1939

March

Hitler and troops enter port of Memel, Lithuania, and annex it to German Reich.

May

Germany and Italy sign 10-year military alliance.

August

Germany and Soviet Russia sign 10-year mutual non-aggression pact.

Britain, France, and Poland sign pact of mutual assistance.

September

Germany invades Poland; annexes Danzig.

Britain and France declare war on Germany.

Russian troops march into eastern Poland.

Warsaw is heavily bombed and surrenders, ending Poland's struggle.

November

President Roosevelt signs amended Neutrality Act, repealing arms embargo and putting exports to belligerents on cash-and-carry basis.

Soviet army invades Finland.

December

German pocket battleship *Graf Spee* is scuttled in Montevideo harbor, Uruguay; German passenger liner *Columbus* scuttled off Cape May, N.J.

1940

March

Russia and Finland sign peace treaty, Russia getting Karelian Isthmus and naval base at Hangoe.

Nazi bombers raid British anchorage at Scapa Flow.

April

Germany invades Denmark and Norway. Denmark submits. Norway, aided by British forces, at first resists, but is partly betrayed by her own fascist sympathizers and is later compelled to surrender.

May

Germany invades Holland, Belgium, and Luxemburg. Holland is overwhelmed after five days. Part of Rotterdam is completely destroyed by aerial attack. Queen Wilhelmina

and her government escape to London.

German troops simultaneously invade France and Belgium. Abbeville on English Channel is reached, and battle of France rages. Germany takes Brussels and Antwerp. King Leopold III of Belgium surrenders his army of 500,000 soldiers, who had been fighting beside Allied forces in Flanders. British troops in Flanders, with some French and Belgian, squeezed into "pocket" rapidly becoming narrower, retreat to channel at Dunkerque. Most of battered British expeditionary forces are rescued by boats from England.

June

Italy enters war against France and Britain.

King Haakon of Norway goes to London.

German troops easily surmount Maginot Line and march into undefended Paris.

Marshal Pétain, French premier, asks Germany for armistice. Armistice signed at Compiègne in railroad car in which Marshal Foch read armistice terms in 1918. "Free French" gather army on English soil under Gen. Charles de Gaulle to continue resistance.

July

British navy acts to take over scattered units of French fleet, attacking ships that refuse to surrender.

President Roosevelt signs bill calling for 2-ocean navy.

Estonia, Latvia, and Lithuania annexed by Russia.

Pan-American Conference at Havana agrees on action against "fifth-column" activities.

August

Italians invade British Somaliland.

German bombers attack London; British bombers attack Berlin.

September

President Roosevelt informs Congress that 50 over-age destroyers will be traded for naval and air bases in British New World territory.

U.S. Congress passes Selective Service Bill.

On climactic day of battle of Britain 187 German planes are destroyed.

King Carol of Rumania abdicates, after Rumania has been broken up by Russia, Bulgaria, and Hungary. Germany, Italy, and Japan sign in Berlin 10-year mutual assistance pact.

October

Italy invades Greece.

November

British fleet's torpedo-carrying planes attack Italian warships at Taranto. British industrial city of Coventry devastated by all-out Luftwaffe attack.

December

British forces drive Italians out of Egypt; invade Libya.

1941

January

President Roosevelt proclaims Four Freedoms in address to Congress.

British troops capture Bardia, Libya, and trap 25,000 Italians. British also seize Tobruk.

March

President Roosevelt signs measure appropriating \$7,000,000,000 for lend-lease aid to United Nations.

British and Italian fleets clash in Ionian Sea in greatest naval battle since Jutland; fascist fleet routed.

April

German armies invade Yugoslavia and Greece; King George II of Greece

flees to Crete; Germans enter Athens.

United States takes Greenland under protection; signs agreement with Danish minister in Washington.

Japan and Soviet Russia sign neutrality pact.

May

Prime Minister Churchill announces that 48,000 troops out of 60,000 originally landed in Greece have been evacuated.

Rudolf Hess, deputy leader of Nazi party, flies mysteriously to Scotland, becomes British prisoner.

German parachutists invade Crete.

American freighter *Robin Moor* sunk in South Atlantic by Nazi submarine.

German battleship *Bismarck* sinks H.M.S. *Hood* in Atlantic; three days later British naval units, aided by American-built patrol bomber, sink *Bismarck*.

Rebellion in Iraq is ended by entry of British troops.

June

British yield Crete, evacuate 15,000.

Hitler and Mussolini hold parley at Brenner Pass.

British and Free French invade Syria, after accusing Vichy regime of allowing Germans to use Syrian air bases.

German armies invade Soviet Russia on 2000-mile front from Arctic to Black Sea.

July

Premier Stalin of Russia, in radio address, challenges Nazi invincibility and calls for "scorched earth" policy.

United States occupies Iceland on invitation from that country.

French government at Vichy announces that it has agreed to Japanese demands for military control of Indo-China.

August

President Roosevelt and Prime Minister Churchill meet at sea and make public Atlantic Charter—joint United States-British statement—outlining 8-point program of peace aims.

Iran, invaded by Britain and Russia, accepts their terms.

Hitler and Mussolini hold 5-day parley on Russian front.

September

Japanese troops bomb Changsha, capital of Hunan Province, China, and begin battle of annihilation against 300,000 troops defending city.

German army enters Kiev, third largest Russian city.

October

U.S. destroyer *Kearny* torpedoed off Iceland; U.S. destroyer *Reuben James* torpedoed in Atlantic.

German armies reported within 60 miles of Moscow; Odessa and Kharkov fall; diplomatic corps and part of Russian government quit Moscow for temporary capital at Kuibyshev, 500 miles inland on Volga.

November

Japanese special envoys Saburo Kurosu and Admiral Nomura arrive in Washington with "last proposals" for peace in the Far East.

Washington extends \$1,000,000,000 lend-lease aid to Soviet Russia.

Germans capture and Russians recapture Rostov; Russia begins offensive in Ukraine.

British aircraft carrier *Ark Royal* sunk by Axis submarines in Mediterranean.

British army begins offensive in Libya.

December

Japan makes surprise attack on Pearl Harbor in Hawaii, the Philippines,

U.S. island possessions, Malaya, and Hong Kong.

U.S. Congress declares war on Japan; Germany and Italy declare war on United States.

British battleships *Prince of Wales* and *Repulse* sunk by Japanese off Malaya.

U.S. Congress passes \$10,077,077,005 appropriation measure for armed forces and lend-lease.

Free French forces seize islands St. Pierre and Miquelon off North America.

Hong Kong falls to Japanese; Manila bombed; American Wake Island garrison surrenders to Japanese.

1942

January

Japanese land forces occupy Manila and Cavite naval base.

Secretary of War Stimson announces arrival in Northern Ireland of U.S. Army forces under command of Major General Russell P. Hartle.

Battle of Macassar Strait.

February

U.S. Navy raids on Marshall and Gilbert islands.

Singapore surrenders to Japanese.

Japanese air raids on Darwin, Australia.

March

Battle of Java Sea; Japanese occupy Batavia.

Japanese invade New Guinea; occupy Rangoon; make landings on Solomon Islands.

Gen. Douglas MacArthur, American commander in Philippines, escapes from Manila to Australia.

U.S. troops arrive in Australia.

April

American-Filipino forces on Bataan, Philippine Islands, surrender to Japanese.

Squadron of American planes, led by Brig. Gen. James H. Doolittle, raids Japanese mainland, including Tokyo, Yokohama, Kobe, Nagoya, and Osaka.

May

Battle of Coral Sea, in which 11 Japanese ships are lost and 12 damaged, and Americans lose carrier, tanker, and destroyer.

Fortress of Corregidor in Manila Bay and satellite forts are surrendered to Japanese by American Lt. Gen. Jonathan M. Wainwright.

Britain makes mass raid with 1,130 planes on Cologne, Germany.

June

Midway Island is attacked by Japanese with heavy losses. Americans lose carrier and destroyer.

Japanese naval and military forces land on islands of Kiska and Attu in Aleutian group.

British lose Libyan port of Tobruk and 25,000 prisoners to Gen. Rommel.

Eight Germans land from German submarines on coasts of Long Island and Florida, and are imprisoned.

Berlin announces fall of Sevastopol in Crimea.

Axis forces capture El Alamein in Egypt.

July

British planes raid Düsseldorf.

Six of eight Germans who had landed in United States are put to death in Washington.

August

British, American, Canadian, and French (de Gaullist) forces land on French Channel coast and make 9-hour attack on German fortress port of Dieppe. Invaders inflict heavy damage and sustain heavy losses.

Japanese sustain heavy losses in battle of eastern Solomons.

September

British forces invade and occupy French island of Madagascar.

October

Battle of Cape Esperance, 2-day sea fight to prevent Japanese landings on Guadalcanal, in which Americans lose destroyer, but sink heavy cruiser, 4 destroyers, and transport. Battle of Santa Cruz Islands, in which heavy losses are sustained by both sides; U.S. aircraft carrier *Hornet* subsequently lost.

November

U.S. Army, Navy, and Air forces land in North Africa. Lt. Gen. Dwight D. Eisenhower of U.S. Army is commander-in-chief of Allied forces. Battle of Guadalcanal, in which 28 Japanese ships are sunk, 10 damaged. Americans sustain heavy damages. French scuttle ships in Toulon harbor. Nazis seize Toulon and order demobilization of entire French army.

1943

January

Russian troops break 17-month siege of Leningrad and open corridor from east, taking 31,000 German prisoners. U.S. Army Air Force makes first attack on enemy objectives in Germany; bombs naval base at Wilhelmshaven.

February

Moscow reports battle near Stalingrad ended with complete victory; 91,000 German prisoners taken. In final offensive on Guadalcanal Island U.S. troops kill 6,066 Japanese and take 127 prisoners.

May

In Bizerte area in North Africa 6 German commanders yield to 2nd U.S.

Corps, signing ultimatum of unconditional surrender. 25,000 prisoners taken. North of Tunis remnants of German armored division surrender to British 7th Armored Division. General von Arnim, commander of Axis forces in Tunisia, is captured.

July

Allied troops conquer Sicily. Rome is attacked by U.S. Air Force; 717 persons killed and 1599 wounded. King Victor Emmanuel of Italy announces resignation of Premier Mussolini and appointment of Pietro Badoglio as successor.

September

Allied forces invade mainland of Italy. In Sicily secret military armistice is signed by representatives of Badoglio administration. British and Canadian troops from Sicily cross Messina Strait and land on coast of province of Calabria. U.S. and British forces land on coast in Naples area. Italian battleship *Rome* is sunk in Mediterranean. Hostilities between Badoglio administration and United Nations end. British and American troops enter Naples. Italy declares war on Germany.

November

U.S. troops land on islands of Makin and Tarawa in Gilberts; official figures reveal that 1,026 marines were killed in Tarawa engagement.

1944

January

Russians start series of vigorous counter-offensives in Leningrad and Novgorod areas. German lines crumple and Nazis are forced back to Baltic area.

U.S. planes, aided by battleships and other war vessels, bombard Wake and Marshall islands. Army and Marine forces to number of 30,000 or more land on islands in vicinity of Kwajalein and Eniwetok.

February

U.S. and French troops meet fierce German resistance on Anzio beach-head in Italy; invaders by-pass Cassino and breach so-called Gustav Line. Ancient abbey of Mount Casino, where Saint Benedict founded his order of monks, is destroyed by U.S. planes and ground artillery.

British and American planes bomb Berlin, Stuttgart, Munich, Frankfurt-on-the-Main, and other German cities.

March

U.S. Army goes into action for first time on continent of Asia when it captures Walawbum in encircling movement in Burma.

Russian troops, moving westward at a pace averaging at times a mile an hour, day and night, cross Dnieper River on 31-mile front and retake 20 towns in Bessarabia.

April

Russians continue triumphant counter-offensive in Black Sea area. Odessa and Sevastopol liberated.

June

Battle of Europe begins when 4,000 ships and 11,000 planes are hurled across English Channel for invasion of France on June 6. Invasion coast covers stretch of more than 100 miles of beach from Le Havre to Cherbourg.

Rome occupied by Allies. U.S. Fifth Army and British Eighth Army take possession.

Russians attack Karelia and force Finland out of the war.

July

Ninth American Army breaks through German lines in St. Lô and Caen areas in Normandy peninsula, following capture of Cherbourg.

Russians capture Minsk and fight their way into streets of Vilna. More than 28,000 Germans are killed and 15,000 are captured in encircled pocket between White Russian capital and Berezina River.

Russians force Rumania and Bulgaria out of war.

August

Allied forces invade France from south and take Marseilles.

Paris freed by Allied armies which approach city from several directions. French troops led by Gen. de Gaulle and Brig. Gen. Jacques-Philippe Leclerc in twin drives storm their way through German mine-fields, artillery barrages, and barricades.

Florence, Italy, is occupied by Allies. Russia reaches outskirts of Warsaw. Within city Polish soldiers and civilians start revolt against German domination and fight for 63 days before surrendering.

September

Return to Philippines is started when forces under Admiral Halsey destroy convoy carrying reserves to Mindanao in southern group of islands. General MacArthur's forces land on Leyte in central Philippines. Naval battle is fought, and Japan loses 2 battleships, 4 carriers, 6 heavy cruisers, and undetermined number of destroyers.

Greece and Albania are cleared of Germans by Allied airborne and sea-borne offensive, launched from Italy across Adriatic by British. Control of Aegean Sea restored to Allies.

October

Russia launches offensive against Hungary. Offensive liberates Bel-

grade, capital of Yugoslavia. Russian troops continue advance through Carpathian Mountains to aid of Czechoslovakia.

U.S. First Army crosses German frontier; besieges and captures city of Aachen.

November

Fierce fighting continues on Leyte. Americans suffer heavy casualties.

In France, near Saar border, American troops under General Patton report advances and capture Belfort and Metz.

German battleship *Tirpitz* is sunk in Norwegian waters.

December

Germans launch unsuccessful counter-offensive on western front.

U.S. troops under General MacArthur land without loss of a man on Mindoro Island, 155 miles south of Manila, in Philippines.

1945

January

American forces under General MacArthur invade the island of Luzon, largest of the Philippine Islands.

German forces begin to retreat following their counter-attack on the western front.

Warsaw falls to the Red Army.

February

American troops recapture Manila.

President Roosevelt, Prime Minister Churchill, and Premier Stalin meet in Yalta and draft a statement reaffirming their position on the unconditional surrender of Germany. They also draw up plans for the occupation of Germany and reach a settlement on the Polish issue, agreeing that the Soviet Union is to annex all Polish territory east of the Curzon Line and that the War-

saw government of Poland is to be re-constituted on a broader basis.

Civil war in Greece between the left and right wing forces ends shortly after the entry of British troops into Athens.

Budapest falls to the Red Army.

United States Marines invade the island of Iwo Jima, 750 miles south of Tokyo.

Turkey and Egypt declare war on Germany and Japan.

March

American troops take Cologne. The first crossing of the Rhine is made at Remagen. The Nazi retreat is beginning to assume the proportions of a rout.

April

The United States Army invades Okinawa, main island of the Ryuku group, 360 miles south of Japan.

Vienna falls to the Red Army.

Russian and American troops join at Torgau, Germany.

Mussolini is executed by Italian partisans.

May

The German army surrenders unconditionally to the United States, Great Britain, and the Soviet Union on May 8 at Reims, France.

The round-up of Nazi war leaders begins. Adolf Hitler and Joseph Goebbels are believed dead. Field Marshal Hermann Goering is captured. SS leader Heinrich Himmler is captured but commits suicide.

In compliance with the Yalta Agreement, the British begin the occupation of western Germany, the United States, southern Germany, and the Soviet Union, eastern Germany.

The redeployment of American forces in the European theater to the Pacific begins.

June

The island of Okinawa is taken after one of the bloodiest battles in American history.

July

General Douglas MacArthur announces the liberation of the Philippine Islands.

August

The first atomic bomb in history is dropped by an American airplane on the city of Hiroshima, a Japanese military base of supply and operations. The bomb, weighing only 400 pounds, releases a destructive force equivalent to that contained in 20,000 pounds of TNT. Hiroshima is virtually wiped off the face of the earth. Development of the atomic bomb involved the combined efforts of scientists of many nationalities under the sponsorship of the United States, Canada, and Great Britain. The bomb was developed at a cost of two billion dollars. The harnessing of atomic energy is hailed as revolutionizing the life of the entire world. A few days later a second atomic bomb devastates Nagasaki, the Japanese naval base.

The Soviet government declares war on Japan and sends its Far Eastern armies against the Japanese forces in Manchukuo.

The Japanese surrender, accepting Potsdam terms. Surrender terms also

provide that the Japanese retain their Emperor, who would, however, take orders from the Allied Supreme Commander.

First United States troops, under General Douglas MacArthur, Allied Supreme Commander, land in Japan. Army and Navy reports are issued on the responsibility for the Pearl Harbor disaster. The Army report places the blame on Lt. Gen. Walter C. Short, who was in charge of the Hawaiian defense command at the time of the Japanese attack, Cordell Hull, who was Secretary of State at the time, and General George C. Marshall, Army chief of staff. The Navy report names Admiral Harold R. Stark, chief of Naval Operations, as responsible. President Truman and Secretary of War Stimson take issue with the naming of General Marshall. Later, Congress orders its own investigation.

September

The formal signing of the Japanese surrender takes place aboard the U.S.S. *Missouri* in Tokyo Bay, on September 2. General MacArthur represents the Allied Supreme Command. Admiral Chester Nimitz represents the United States. Each of the Allied nations is also represented.

The United States Army, under General MacArthur, takes over the government of Japan.

PARTICIPANTS IN SECOND WORLD WAR

ALLIED NATIONS

Argentina	France	Norway
Australia	Great Britain	Panama
Belgium	Greece	Paraguay*
Bolivia	Guatemala	Peru*
Brazil	Haiti	Poland
Canada	Honduras	Rumania
Chile*	India	(from Aug., 1944)
China	Iran	Salvador
Colombia*	Iraq	San Marino
Costa Rica	Italy (from Oct., 1943)	Turkey
Cuba	Liberia	Union of South Africa
Czechoslovakia	Luxemburg	United States
Denmark	Martinique	Union of Soviet Socialist
Dominican Republic	Mexico	Republics
Ecuador*	The Netherlands	Uruguay*
Egypt*	New Zealand	Venezuela*
Ethiopia	Nicaragua	Yugoslavia

*Ended relations, but did not declare war.

ENEMY NATIONS

and Dates of Surrender

Albania—1944	Germany—1945	Rumania—1944
Bulgaria—1944	Hungary—1945	Thailand—1945
Burma—1945	Italy—1943	
Finland*—1944	Japan—1945	

*Not at war with the United States.

U.S. War Production in Second World War

The grand total of war materials produced from July, 1940, through July, 1945, was valued at \$186,000,000,000, according to the War Production Board. This included:

A fleet of 297,000 military airplanes, of which 97,000 were bombers. 76,485

ships—including 64,500 landing craft, 6,500 other navy ships and 5,426 cargo vessels. 17,400,000 rifles, carbines and sidearms; 315,000 pieces of field artillery and mortars; 165,525 naval guns. 41,400,000,000 rounds of small arms ammunition; 4,200,000 tons of artillery shells. 86,338 tanks and 2,434,553 trucks.

PERSONALITIES OF THE SECOND WORLD WAR

ALEXANDER, GENERAL SIR HAROLD. Commander of British Middle East armies, later of the Allied Fifteenth Army Group in Italy. Later commanded the Allied Central Mediterranean Forces in Italy.

ANDERS, GENERAL WLADYSLAV. Commander-in-chief of the Polish Army.

ANTONESCU, MARSHAL ION. Dictator of Rumania under Nazi control.

ARNIM, GENERAL JÜRGEN VON. A German commander in Africa, was captured in the Battle of Tunisia.

ARNOLD, GENERAL HENRY H. Commander of the U.S. Army Air Forces.

ATTLEE, CLEMENT R. Became British Prime Minister in 1945.

AUCHINLECK, GENERAL SIR CLAUDE. Commander of British forces in Africa until 1943.

BAGRAMIAN, GENERAL IVAN C. Commander of Russia's First Baltic Army.

BENES, EDUARD. President of Czechoslovakia from 1935.

BEVIN, ERNEST. Became British Foreign Secretary in 1945.

BOR, GENERAL (LIEUTENANT GENERAL TADEUSZ KOMOROWSKI). Led Polish forces in Warsaw against Nazis during Russian assault on the city.

BOWLES, CHESTER. Director of the Office of Price Administration from 1943.

BRADLEY, GENERAL OMAR. Commanded American troops in Africa and Europe. In 1945 was named head of the Veterans Administration.

BRAUCHITSCH, MARSHAL WALTHER VON. Supreme Commander of German forces until December, 1941.

BRERETON, LIEUTENANT GENERAL LEWIS H. Commanded American Ninth and Tenth Air Forces, organized First Allied Airborne Army, which invaded the Netherlands.

BUDYENNY, MARSHAL SIMEON. Russian cavalry expert, participated in the 1941 defense of the Ukraine.

BYRNES, JAMES F. Director of economic stabilization, then of war mobilization. Named Secretary of State in 1945.

CALLAGHAN, ADMIRAL DANIEL J. Led American naval force in Battle of Guadalcanal, was killed in this action.

CARLSON, LIEUTENANT COLONEL EVANS. Commanded a Marine guerrilla unit known as "Carlson's Raiders" on Makin Island and Guadalcanal.

CAROL, KING. Rumanian ruler, abdicated in September, 1940.

CHAMBERLAIN, SIR NEVILLE. British Prime Minister, 1937 to May, 1940.

CHENNAULT, MAJOR GENERAL CLAIRE L. Led "Flying Tigers," American volunteer group in China. Later was air commander in the China-Burma-India theater.

CHERNYAKOVSKY, GENERAL IVAN D. Led Third White Russian Army in invasion of East Prussia. Killed in action.

CHIANG KAI-SHEK, GENERALISSIMO. Ruler and military leader of China.

CHURCHILL, WINSTON. British Prime Minister, 1940-45.

CIANO, GALEAZZO. Italian Foreign Minister. Executed by Fascists in 1945.

CLARK, GENERAL MARK W. Commanded American Fifth Army, then all Allied forces, in Italy.

CROWLEY, LEO T. U.S. alien property custodian and head of the Foreign Economic Administration.

CUNNINGHAM, ADMIRAL SIR ANDREW. British, commander of Allied Mediterranean Fleet.

DALADIER, EDOUARD. French Premier at the time of the French collapse in 1940.

DARLAN, ADMIRAL JEAN. Surrendered French forces on Allied invasion of North Africa. Became chief of state of French Africa. Was assassinated in December, 1942.

DAVIS, ELMER. American, director of the Office of War Information.

DAVIS, WILLIAM H. American, chairman of the War Labor Board.

DE GAULLE, GENERAL CHARLES. Established French provisional government in 1940, later President of Committee of National Liberation.

DEMPSEY, LIEUTENANT GENERAL MILES C. Commander of British Second Army in France and Belgium.

DEVERS, GENERAL JACOB L. American, Deputy Supreme Commander in Mediterranean theater. Later commanded Allied Sixth Army Group.

DILL, FIELD MARSHAL SIR JOHN. A British member of the Combined Chiefs of Staff.

DOOLITTLE, LIEUTENANT GENERAL JAMES H. Commanded first American air raid on Tokyo. Later commanded Eighth Air Force in Europe.

EAKER, LIEUTENANT GENERAL IRA C. American, commander of Allied Air Force in the Mediterranean theater. Later was deputy commander of the Army Air Forces.

EDEN, SIR ANTHONY. British Foreign Secretary from 1940 to July, 1945.

EISENHOWER, GENERAL DWIGHT D. Supreme Allied Commander in Africa and Europe. Later, commander of the American occupation forces in the European theater.

FORRESTAL, JAMES V. American, became Secretary of Navy in 1944.

FRANCO, GENERAL FRANCISCO. Spanish dictator.

GAMELIN, MARSHAL MAURICE. Commander of the French Army, 1935-40.

GIRAUD, GENERAL HENRI. Led French troops in support of Allies in Africa. Later, with De Gaulle, President of the Committee of National Liberation.

GOEBBELS, JOSEPH. Nazi Minister of Propaganda. Presumed dead.

GOERING, MARSHAL HERMANN. Nazi air minister. Captured by Allies in 1945.

GRAZIANI, MARSHAL RODOLFO. Italian commander in Libya.

GREW, JOSEPH C. American ambassador to Japan at the time of Pearl Harbor. Later Assistant, then Under Secretary of State.

GUDERIAN, GENERAL HEINZ. A commander of German panzer armies in Russia. Later chief-of-staff.

HAILE SELASSIE. Emperor of Ethiopia, which was cleared of Italian forces in May, 1941.

HALSEY, ADMIRAL WILLIAM F. Commander of the U.S. Third Fleet, which operated in the Pacific.

HARRIS, AIR MARSHAL SIR ARTHUR T. A British member of the Combined Chiefs of Staff. In 1944 was named chief of British Strategic Bombers.

HENDERSON, LEON. American, director of the Office of Price Administration, 1941-43.

HERSHEY, MAJOR GENERAL LEWIS B. Director of U.S. Selective Service System.

HESS, RUDOLF. Deputy Nazi leader, flew to Scotland in May, 1941.

HIMMLER, HEINRICH. Nazi Gestapo chief, storm troop leader. Committed suicide in 1945, when captured by Allies.

HIROHITO. Emperor of Japan.

HITLER, ADOLF. Dictator of Germany, 1933-45. Believed dead.

HOBBS, COLONEL OVETA CULP. American, director of the WACS.

HODGES, LIEUTENANT GENERAL
COURTNEY H. Commander of the U.S. First Army in France and Germany.

HULL, CORDELL. American, Secretary of State, 1933-44.

KAISER, HENRY J. American, large-scale producer of ships and war materials.

KENNEY, LIEUTENANT GENERAL
GEORGE C. Commander of U.S. Fifth Air Force in the Pacific, later of the Far Eastern Air Force.

KESSELRING, MARSHAL ALBERT. Commander of German forces in Italy.

KING, ADMIRAL ERNEST J. Commander-in-chief of the U.S. Fleet and chief of Naval Operations.

KINKAID, ADMIRAL THOMAS C. Commander of the U.S. South Pacific Force, Seventh Fleet.

KNOX, FRANK. American, Secretary of the Navy, 1940-44.

KNUDSEN, LIEUTENANT GENERAL
WILLIAM S. American, director of the Office of Production Management.

KONEV, MARSHAL IVAN S. Commander of Russia's Second Ukrainian Army.

KRUG, J. A. American, director of War Production Board. Succeeded Donald M. Nelson in 1945.

KURUSU, SABURO. Special Japanese envoy to the U.S. at the time of Pearl Harbor.

LAVAL, PIERRE. French Premier during Nazi occupation of France. Convicted of treason and executed in 1945.

LEAHY, ADMIRAL WILLIAM D. American minister to Vichy France. Later was Chief of Staff to the Commander-in-chief.

LECLERC, GENERAL JACQUES-PHILIPPE. Led French forces in liberation of Paris.

LEHMAN, HERBERT H. American, Director-General of the United Nations Relief and Rehabilitation Administration.

LEIGH-MALLORY, AIR CHIEF MARSHAL
TRAFFORD L. British, commander of Allied Expeditionary Air Forces.

LEOPOLD III, KING. Ruler of Belgium, was refused re-entry into the country following its liberation.

LITVINOV, MAXIM. Russian ambassador to the U.S., 1941-43.

MACARTHUR, GENERAL DOUGLAS. American, Supreme Allied Commander in the Pacific and in Japan.

McAFEE, CAPTAIN MILDRED H. American, director of the WAVES.

McNAIR, LIEUTENANT GENERAL
LESLEY J. Commander of U.S. Army Ground Forces in Europe, was killed in France.

McNUTT, PAUL V. American, head of War Manpower Commission. Later named High Commissioner to the Philippines.

MAO TSE-TUNG. Chinese communist leader.

MALINOVSKY, MARSHAL RODION. Commander of Russia's Second Ukrainian Army, which captured Budapest.

MANNERHEIM, MARSHAL CARL VON. Commander of Finnish armies.

MARSHALL, GEORGE C. Chief of Staff of U.S. Army.

MERRILL, MAJOR GENERAL FRANK. Head of "Merrill's Marauders," a U.S. Army commando force that operated in Burma.

MICHAEL, KING. Ruler of Rumania.

MIKHAILOVICH, DRAJA. Yugoslavian, leader of the Chetniks.

MITSCHER, ADMIRAL MARC A. Commander of U.S. Task Force 58 in the Pacific.

MOLOTOV, VYACHESLAV. Russian Foreign Commissar, named in 1939.

MONTGOMERY, MARSHAL SIR BERNARD L. Commander of the British Eighth Army in Africa and Europe. Later commander of Allied ground forces.

MORGENTHAU, JR., HENRY. American, Secretary of the Treasury, 1934-45.

MOUNTBATTEN, ADMIRAL LORD LOUIS. British, Supreme Allied Commander in Southeast Asia.

MUSSOLINI, BENITO. Dictator of Italy. Was killed by Italian Partisans in 1945.

NELSON, DONALD M. American, director of the War Production Board, 1942-45.

NIMITZ, ADMIRAL CHESTER W. Commander-in-chief of the U.S. Pacific Fleet and of Pacific Ocean areas.

NOMURA, ADMIRAL KICHISABURO. Japanese ambassador to the U.S. in December, 1941.

OSMEÑA, SERGIO. Filipino President.

PATCH, LIEUTENANT GENERAL ALEXANDER M. Commander of the U.S. Seventh Army in Europe.

PATTON, GENERAL GEORGE S. Commander of the U.S. Third Army.

PAULUS, MARSHAL FRIEDRICH. German commander, was captured in the Battle of Stalingrad.

PÉTAİN, MARSHAL HENRI-PHILIPPE. French chief of state in Vichy government. Tried and convicted of treason in 1945. Death sentence commuted to life imprisonment.

PETER II, KING. Ruler of Yugoslavia.

PETROV, GENERAL IVAN. Commander of Russia's Fourth Ukrainian Army.

PRICE, BYRON. American, director of the Office of Censorship.

PLYE, ERNIE. American, war correspondent. Killed in the Pacific in 1945.

QUEZON, MANUEL. Filipino President, died in 1944.

QUISLING, VIDKUN. Norwegian Nazi leader, was head of Norwegian state during Nazi occupation. Convicted of treason and executed in 1945. His name became synonymous with "traitor."

REYNAUD, PAUL. French Premier at the time of France's defeat.

RIBBENTROP, JOACHIM VON. Nazi Foreign Minister, was captured by the Allies in 1945.

ROKOSHOVSKY, MARSHAL KONSTANTIN. Commander of Russia's First Ukrainian Army. Recaptured Warsaw.

ROMMEL, MARSHAL ERWIN. German commander in Africa and Europe. Was known as the "desert fox."

ROOSEVELT, FRANKLIN D. American President, 1933-45.

RUNDSTEDT, MARSHAL KARL VON. Commanded southern German armies against Russia, launched counter-offensive against Allies in December, 1945.

SHAPOSHNIKOV, MARSHAL BORIS. Chief of staff of Russian army.

SHIMADE, ADMIRAL. Chief of staff of Japanese Navy.

SIMPSON, LIEUTENANT GENERAL WILLIAM H. Commander of U.S. Ninth Army.

SOMERVELL, LIEUTENANT GENERAL BREHON. Head of U.S. Army Service Forces.

SOONG, T. V. Chinese Foreign Minister.

SPAATZ, GENERAL CARL. Head of U.S. Strategic Air Force in Europe.

SPRUANCE, ADMIRAL RAYMOND A. Commander of the U.S. Fifth Fleet, which operated in the Pacific.

STALIN, MARSHAL JOSEPH. Chairman of the Council of People's Commissars, head of Russian Communist Party.

STARK, ADMIRAL HAROLD R. Commander of U.S. Naval Forces in Europe.

STETTINIUS, EDWARD R. American, lend-lease administrator, 1941-44; Secretary of State, 1944-45; appointed U.S. delegate to United Nations Organization in 1945.

STILWELL, GENERAL JOSEPH W. American, commander of Allied ground forces in North Burma. Then Deputy Supreme Allied Commander of the Southeast Asia Command. Later named commander of the Tenth Army, based on Okinawa.

STIMSON, HENRY L. American, Secretary of War, 1940-45.

STRATEMEYER, MAJOR GENERAL
GEORGE E. Commander of U.S. Army
Air Forces in the India-Burma Sec-
tor.

STÜLPNÄGEL, GENERAL JOACHIM
VON. Commander of the German
Seventeenth Army.

TEDDER, AIR MARSHAL SIR ARTHUR.
British, commander of Allied air forces
in Africa. Later Deputy Supreme
Allied Commander.

TIMOSHENKO, MARSHAL SIMEON.
Russian Commissar for Defense. Later
in command of the defense of Stalin-
grad and the Caucasus.

TITO, MARSHAL (JOSIP BROZOVICH).
Leader of the Yugoslavian Partisans.
Later Premier.

TOJO, HIDEKI. Japanese Prime Min-
ister at the time of the Pearl Harbor
attack.

TOLBUKHIN, MARSHAL FEODOR.
Commander of Russia's Third and
Fourth Ukrainian Armies.

VANDEGRIFT, LIEUTENANT GENERAL
ALEXANDER A. Commandant of U.S.
Marine Corps.

VATUTIN, MARSHAL NIKOLAI. Com-
mander of Russia's First Ukrainian
Army.

VICTOR EMMANUEL. King of Italy.

VINSON, FRED M. American, direc-
tor of the Office of Economic Stabiliza-
tion. Named Secretary of Treasury in
1945.

VOROSHILOV, MARSHAL KLEMENTI.
Commander of Russian armies on the
Leningrad front.

WAINWRIGHT, GENERAL JONATHAN
M. U.S. commander on Bataan when
it fell to the Japanese; was a Japanese
prisoner, 1942-45.

WAVELL, MARSHAL SIR ARCHIBALD.
British commander in the Middle East.
Later Allied Supreme Commander in
Southeast Asia, then Viceroy of India.

WEDEMEYER, LIEUTENANT GEN-
ERAL ALBERT C. Commander of U.S.
forces in China.

WELLES, SUMNER. American, Under
Secretary of State, 1937-43.

WEYGAND, MARSHAL MAXIME.
French commander during retreat be-
fore Germans in 1940.

WILLKIE, WENDELL L. American,
candidate for President in 1940.
Visited Allied nations as President
Roosevelt's envoy. Coined the phrase,
"One World." Died in 1944.

WILSON, SIR HENRY MAITLAND.
British, Supreme Allied Commander
in Italy.

WINGATE, MAJOR GENERAL ORDE
C. Commander of British airborne in-
fantry in Burma, a group known as
"Wingate's Raiders."

ZHUKOV, MARSHAL GREGORI. Com-
mander of Russia's First Ukrainian
Army. Later army chief in Russian-
occupied Germany.

THE CHARTER OF THE UNITED NATIONS

The Charter of the United Nations was adopted by the United Nations Conference on International Organization, meeting in San Francisco, on June 25, 1945. It was put in force on October 24, 1945, following the ratification by Russia, the twenty-ninth nation to do so. Here is the full text:

We, the peoples of the United Nations

Determined to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and

To reaffirm faith in fundamental human rights, in the dignity and worth

of the human person, in the equal rights of men and women and of nations large and small, and

To establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and

To promote social progress and better standards of life in larger freedom, and for these ends

To practice tolerance and live together in peace with one another as good neighbors, and

To unite our strength to maintain international peace and security, and

To insure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and

To employ international machinery for the promotion of the economic and social advancement of all peoples, have resolved to combine our efforts to accomplish these aims.

Accordingly, our respective governments, through representatives assembled in the city of San Francisco, who have exhibited their full powers found to be in good and due form, have agreed to the present Charter of the United Nations and do hereby establish an international organization to be known as the United Nations.

CHAPTER I

PURPOSES

ARTICLE I

The purposes of the United Nations are:

1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of in-

ternational disputes or situations which might lead to a breach of the peace;

2. To develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace;

3. To achieve international cooperation in solving international problems of an economic, social, cultural or humanitarian character, and in promoting and encouraging respect for human rights and for the fundamental freedoms for all without distinction as to race, sex, language or religion; and

4. To be a center for harmonizing the actions of nations in the attainment of these common ends.

PRINCIPLES

ARTICLE 2

The organization and its members, in pursuit of the purposes stated in Article 1, shall act in accordance with the following principles:

1. The organization is based on the principle of the sovereign equality of all its members.

2. All members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligations assumed by them in accordance with the present charter.

3. All members shall settle their international disputes by peaceful means in such a manner that international peace, and security, and justice, are not endangered.

4. All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any member or state, or in any other manner inconsistent with the purposes of the United Nations.

5. All members shall give the United Nations every assistance in any action it takes in accordance with the provi-

sions of the present charter, and shall refrain from giving assistance to any state against which the United Nations is taking preventive or enforcement action.

6. The organization shall ensure that states not members act in accordance with these principles so far as may be necessary for the maintenance of international peace and security.

7. Nothing contained in the present charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the members to submit such matters to settlement under the present charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII.

CHAPTER II

MEMBERSHIP

ARTICLE 3

The original members of the United Nations shall be the states which, having participated in the United Nations Conference on International Organization at San Francisco, or have previously signed the declaration of the United Nations of Jan. 1, 1942, sign the present charter and ratify it in accordance with Article 110.

ARTICLE 4

1. Membership in the United Nations is open to all other peace-loving states which accept the obligations contained in the present charter and which, in the judgment of the organization, are able and willing to carry out these obligations.

2. The admission of any such state to membership in the United Nations will be effected by a decision of the General Assembly upon the recommendation of the Security Council.

ARTICLE 5

A member of the United Nations against which preventive or enforce-

ment action has been taken by the Security Council may be suspended from the exercise of the rights and privileges of membership by the General Assembly upon the recommendation of the Security Council. The exercise of these rights and privileges may be restored by the Security Council.

ARTICLE 6

A member of the United Nations which has persistently violated the principles contained in the present charter may be expelled from the organization by the General Assembly upon the recommendation of the Security Council.

CHAPTER III

ORGANS

ARTICLE 7

1. There are established as the principal organs of the United Nations: A General Assembly, a Security Council, an Economic and Social Council, an International Court of Justice, a Trusteeship Council and a Secretariat.

2. Such subsidiary organs as may be found necessary may be established in accordance with the present charter.

ARTICLE 8

The United Nations shall place no restrictions on the eligibility of men and women to participate in any capacity and under conditions of equality in the principal and subsidiary organs.

CHAPTER IV

The General Assembly

COMPOSITION

ARTICLE 9

The General Assembly shall consist of all the members of the United Nations.

Each member shall not have more than five representatives in the General Assembly.

FUNCTIONS AND POWERS

ARTICLE 10

The General Assembly may discuss any questions or any matters within the scope of the present Charter or relating to the powers and functions of any organs provided in the present Charter, and, except as provided in Article 12, may make recommendations to the members of the United Nations or to the Security Council, or both, on any such questions or matters.

ARTICLE 11

1. The General Assembly may consider the general principles of cooperation in the maintenance of international peace and security, including the principles governing disarmament and the regulations of armaments, and may make recommendations with regard to such principles to the members or to the Security Council or both.

2. The General Assembly may discuss any questions relating to the maintenance of international peace and security brought before it by any member of the United Nations, or by the Security Council, or by a State, which is not a member of the United Nations, in accordance with the provisions of Article 35, Paragraph 2, and, except as provided in Article 12, may make recommendations with regard to any such questions to the State or States concerned or to the Security Council, or both. A question on which action is necessary shall be referred to the Security Council by the General Assembly either before or after discussion.

3. The General Assembly may call the attention of the Security Council to situations which are likely to endanger international peace and security.

4. The powers of the General Assembly set out in this article shall not limit the general scope of Article 10.

ARTICLE 12

1. While the Security Council is exercising in respect of any dispute or situation the functions assigned to it in the present Charter, the General Assembly shall not make any recommendation with regard to that dispute or situation unless the Security Council so requests.

2. The Secretary General, with the consent of the Security Council, shall notify the General Assembly at each session of any matters relative to the maintenance of international peace and security which are being dealt with by the Security Council and shall similarly notify the General Assembly, or the members of the United Nations if the General Assembly is not in session, immediately the Security Council ceases to deal with such matters.

ARTICLE 13

1. The General Assembly shall initiate studies and make recommendations for the purpose of:

(a) Promoting international cooperation in the political field and encouraging the progressive development of international law and its codification;

(b) Promoting international cooperation in the economic, social, cultural, educational and health fields and assisting in the realization of human rights and basic freedoms for all without distinction as to race, sex, language or religion.

2. The further responsibilities, functions and powers of the General Assembly with respect to matters mentioned in Paragraph (b) above are set forth in Chapters IX and X.

ARTICLE 14

Subject to the provisions of Article 12, the General Assembly may recommend measures for the peaceful adjustment of any situation, regardless of origin, which it deems likely to impair the general welfare or friendly rela-

tions among nations, including situations resulting from a violation of the provisions of the present Charter setting forth the purposes and principles of the United Nations.

ARTICLE 15

1. The General Assembly shall receive and consider annual and special reports from the Security Council; these reports shall include an account of the measures that the Security Council has adopted or applied to maintain international peace and security.

2. The General Assembly shall receive and consider reports from the other bodies of the organization.

ARTICLE 16

The General Assembly shall perform such functions with respect to the international trusteeship system as are assigned to it under Chapters XII and XIII, including the approval of the trusteeship agreements for areas not designated as strategic.

ARTICLE 17

1. The General Assembly shall consider and approve the budget of the organization.

2. The General Assembly shall consider and approve any financial and budgetary arrangements with specialized agencies referred to in Article 57 and shall examine the administrative budgets of such specialized agencies with a view to making recommendations to the agencies concerned.

3. The expenses of the organization shall be borne by the members as apportioned by the General Assembly.

VOTING

ARTICLE 18

1. Each member of the United Nations shall have one vote in the General Assembly.

2. Decisions of the General Assem-

bly on important questions shall be made by a two-thirds majority of those present and voting. These questions shall include: recommendations with respect to the maintenance of international peace and security, the election of the non-permanent members of the Security Council, the election of the members of the Economic and Social Council, the election of the members of the United Nations which are to designate the members on the Trusteeship Council in accordance with the provisions of Article 86 (C), the admission of new members to the United Nations, the expulsion of members, the suspension of the rights and privileges of members, questions relating to the operations of the trusteeship system, and budgetary questions.

3. Decisions on other questions—including the determination of additional categories of questions to be decided by a two-thirds majority—shall be made by a majority of those present and voting.

ARTICLE 19

A member which is in arrears in the payments of its financial contributions to the organization shall have no vote if the amount of its arrears equals or exceeds the amount of the contributions due from it for the preceding two full years. The General Assembly may, nevertheless, permit such a member to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the member.

PROCEDURE

ARTICLE 20

The General Assembly shall meet in regular annual sessions and in such special sessions as occasion may require. Special sessions shall be convoked by the Secretary General at the request of the Security Council or of a majority of the members of the United Nations.

ARTICLE 21

The General Assembly shall adopt its own rules of procedure. It shall elect its president for each session.

ARTICLE 22

The General Assembly may establish such subsidiary organs as it deems necessary for the performance of its functions.

CHAPTER V

The Security Council

COMPOSITION

ARTICLE 23

1. The Security Council shall consist of eleven members of the United Nations. The United States of America, the United Kingdom of Great Britain and Northern Ireland, the Union of Soviet Socialist Republics, the Republic of China, and France, shall be permanent members of the Security Council. The General Assembly shall elect six other members of the United Nations to be non-permanent members of the Security Council, due regard being specially paid, in the first instance to the contribution of members of the United Nations to the maintenance of international peace and security and to the other purposes of the organization, and also to equitable geographical distribution.

2. The non-permanent members of the Security Council shall be elected for a term of two years. In the first election of the non-permanent members, however, three shall be chosen for a term of one year. A retiring member shall not be eligible for immediate re-election.

3. Each member of the Security Council shall have one representative.

PRIMARY RESPONSIBILITY

ARTICLE 24

1. In order to insure prompt and effective action by the United Nations,

its members confer on the Security Council primary responsibility for the maintenance of international peace and security, and agree that in carrying out its duties under this responsibility the Security Council acts on their behalf.

2. In discharging these duties the Security Council shall act in accordance with the purposes and principles of the United Nations. The specific powers granted to the Security Council for the discharge of these duties are laid down in Chapters VI, VII, VIII and XII.

3. The Security Council shall submit annual and, when necessary, special reports to the General Assembly for its consideration.

ARTICLE 25

The members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the provisions of the present charter.

ARTICLE 26

In order to promote the establishment and maintenance of international peace and security with the least diversion for armaments of the world's human and economic resources, the Security Council shall be responsible for formulating, with the assistance of the Military Staff Committee, referred to in Article 47, plans to be submitted to the members of the United Nations for the establishment of a system for the regulation of armaments.

VOTING

ARTICLE 27

1. Each member of the Security Council shall have one vote.

2. Decisions of the Security Council on procedural matters shall be made by an affirmative vote of seven members.

3. Decisions of the Security Council on all other matters shall be made

by an affirmative vote of seven members including the concurring votes of the permanent members; provided that, in decisions under Chapter VI and under Paragraph 3 of Article 52 a party to a dispute shall abstain from voting.

PROCEDURE

ARTICLE 28

1. The Security Council shall be so organized as to be able to function continuously. Each member of the Security Council shall for this purpose be represented at all times at the seat of the organization.

2. The Security Council shall hold periodic meetings at which each of its members may, if it so desires, be represented by a member of the Government or by some other specially designated representative.

3. The Security Council may hold meetings at such places other than the seat of the organization as in its judgment may best facilitate its work.

ARTICLE 29

The Security Council may establish such subsidiary organs as it deems necessary for the performance of its functions.

ARTICLE 30

The Security Council shall adopt its own rules of procedure, including the method of selecting its president.

ARTICLE 31

Any member of the United Nations which is not a member of the Security Council may participate without a vote in the discussion of any question brought before the Security Council whenever the latter considers that the interests of that member are specially affected.

ARTICLE 32

Any member of the United Nations which is not a member of the Security Council or any State not a member of

the United Nations, if it is a party to a dispute under consideration by the Security Council, shall be invited to participate in the discussion relating to the dispute. The Security Council shall lay down such conditions as it may deem just for the participation of a State which is not a member of the United Nations.

CHAPTER VI

PACIFIC SETTLEMENT OF DISPUTES

ARTICLE 33

1. The parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, inquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.

2. The Security Council shall, when it deems necessary, call upon the parties to settle their dispute by such means.

ARTICLE 34

The Security Council may investigate any dispute, or any situation which might lead to international friction or give rise to a dispute, in order to determine whether its continuance is likely to endanger the maintenance of international peace and security.

ARTICLE 35

1. Any member of the United Nations may bring any dispute or any situation of the nature referred to in Article 34 to the attention of the Security Council, or of the General Assembly.

2. A state which is not a member of the United Nations may bring to the attention of the Security Council or of the General Assembly any dispute to which it is a party, if it accepts in advance, for the purposes of the dispute, the obligations of pacific

settlement provided in the present charter.

3. The proceedings of the General Assembly in respect of matters brought to its attention under this article will be subject to the provisions of Articles 11 and 12.

ARTICLE 36

1. The Security Council may, at any stage of a dispute of the nature referred to in Article 33 or of a situation of like nature, recommend appropriate procedures or methods of adjustment.

2. The Security Council should take into consideration any procedures for the settlement of the dispute which have already been adopted by the parties.

3. In making recommendations under this article the Security Council should take into consideration that legal disputes should as a general rule be referred by the parties to the International Court of Justice in accordance with the provisions of the statute of the court.

ARTICLE 37

1. Should the parties to a dispute of the nature referred to in Article 33 fail to settle it by the means indicated in that article, they shall refer it to the Security Council.

2. If the Security Council deems that the continuance of the dispute is in fact likely to endanger the maintenance of international peace and security, it shall decide whether to take action under Article 36 or to recommend such terms of settlement as it may consider appropriate.

ARTICLE 38

Without prejudice to the provisions of Articles 33-37 of this chapter, the Security Council may, if all the parties to any dispute so request, make recommendations to the parties with a view to a peaceful settlement of the dispute.

CHAPTER VII

ACTION WITH RESPECT TO THREATS TO THE PEACE, BREACHES OF THE PEACE AND ACTS OF AGGRESSION

ARTICLE 39

The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with the provisions of Articles 41 and 42, to maintain or restore international peace and security.

ARTICLE 40

In order to prevent an aggravation of the situation, the Security Council may, before making the recommendations or deciding upon the measures provided for in Article 41, call upon the parties concerned to comply with such provisional measures as it deems necessary or desirable. Such provisional measures shall be without prejudice to the rights, claims, or position of the parties concerned. The Security Council shall duly take account of failure to comply with such provisional measures.

ARTICLE 41

The Security Council may decide what measures not involving the use of armed force are to be employed to give effect to its decisions, and it may call upon members of the United Nations to apply such measures. These may include complete or partial interruptions of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.

ARTICLE 42

Should the Security Council consider that measures provided for in Article 41 would be inadequate, or have proved to be inadequate, it may take such action by air, sea or land

forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea or land forces of members of the United Nations.

ARTICLE 43

1. All members of the United Nations, in order to contribute to the maintenance of international peace and security, undertake to make available to the Security Council, on its call and in accordance with a special agreement or agreements, armed forces, assistance, and facilities, including rights of passage, necessary for the purpose of maintaining international peace and security.

2. Such agreement or agreements shall govern the numbers and types of forces, their degree of readiness and general location, and the nature of the facilities and assistance to be provided.

3. The agreement or agreements shall be negotiated as soon as possible on the initiative of the Security Council. They shall be concluded between the Security Council and member states or between the Security Council and groups of member states and shall be subject to ratification by the signatory states in accordance with their constitutional processes.

ARTICLE 44

When the Security Council has decided to use force it shall, before calling upon a member not represented on it to provide armed forces in fulfillment of the obligations assumed under Article 43, invite that member, if the member so desires, to participate in the decisions of the Security Council concerning the employment of contingents of that member's armed forces.

ARTICLE 45

In order to enable the United Nations to take urgent military measures, members shall hold immediately avail-

able national air force contingents for combined international enforcement action. The strength and degree of readiness of these contingents and plans for their combined action shall be determined, within the limits laid down in the special agreement or agreements referred to in Article 43, by the Security Council with the assistance of the Military Staff Committee.

ARTICLE 46

Plans for the application of armed force shall be made by the Security Council with the assistance of the Military Staff Committee.

ARTICLE 47

1. There shall be established a Military Staff Committee to advise and assist the Security Council on all questions relating to the Security Council's military requirements for the maintenance of international peace and security, the employment and command of forces placed at its disposal, the regulation of armaments, and possible disarmament.

2. The Military Staff Committee shall consist of the Chiefs of Staff of the permanent members of the Security Council or their representatives. Any member of the United Nations not permanently represented on the committee shall be invited by the committee to be associated with it when the efficient discharge of the committee's responsibilities requires the participation of that member in its work.

3. The Military Staff Committee shall be responsible, under the Security Council, for the strategic direction of any armed forces placed at the disposal of the Security Council. Questions relating to the command of such forces shall be worked out subsequently.

4. The Military Staff Committee, with the authorization of the Security Council and after consultation with

appropriate regional agencies, may establish regional subcommittees.

ARTICLE 48

1. The action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all the members of the United Nations, or by some of them, as the Security Council may determine.

2. Such decisions shall be carried out by the members of the United Nations directly and through their action in the appropriate international agencies of which they are members.

ARTICLE 49

The members of the United Nations shall join in affording mutual assistance in carrying out the measures decided upon by the Security Council.

ARTICLE 50

If preventive or enforcement measures against any state are taken by the Security Council, any other state, whether a member of the United Nations or not, which finds itself confronted with special economic problems arising from the carrying out of those measures shall have the right to consult the Security Council with regard to a solution of those problems.

ARTICLE 51

Nothing in the present charter shall impair the inherent right of individual or collective self-defense, if an armed attack occurs against a member of the organization, until the Security Council has taken the measures necessary to maintain international peace and security. Measures taken by members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present charter to take at any time such action as it may deem

necessary in order to maintain or restore international peace and security.

CHAPTER VIII

REGIONAL ARRANGEMENTS

ARTICLE 52

1. Nothing in the present Charter precludes the existence of regional arrangements or agencies for dealing with such matters relating to the maintenance of international peace and security as are appropriate for regional action, provided that such arrangements or agencies and their activities are consistent with the purposes and principles of the organization.

2. The members of the United Nations entering into such arrangements or constituting such agencies shall make every effort to achieve peaceful settlement of local disputes through such regional arrangements or by such regional agencies before referring them to the Security Council.

3. The Security Council should encourage the development of peaceful settlement of local disputes through such regional arrangements or by such regional agencies either on the initiative of the states concerned or by reference from the Security Council.

4. This article in no way impairs the application of Articles 34 and 35.

ARTICLE 53

1. The Security Council shall, where appropriate, utilize such arrangements or agencies for enforcement action under its authority. But no enforcement action shall be taken under regional arrangements or by regional agencies without the authorization of the Security Council, with the exception of measures against any enemy state, as described below, provided for pursuant to Article 107, or in regional arrangements directed against renewal of aggressive policy on the part of any such state, until such time as the organization may, on re-

quest of the governments concerned, be charged with the responsibility for preventing further aggression by such a state.

2. The term "enemy state" as used in Paragraph 1 of this article applies to any state which during the second World War has been an enemy of any signatory of the present charter.

ARTICLE 54

The Security Council shall at all times be kept fully informed of activities undertaken, or in contemplation, under regional arrangements or by regional agencies for the maintenance of international peace and security.

CHAPTER IX

INTERNATIONAL ECONOMIC AND SOCIAL COOPERATION

ARTICLE 55

With a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote:

(A) Higher standards of living, full employment, and conditions of economic and social progress and development;

(B) Solutions of international economic, social, health, and related problems and international cultural and educational cooperation and

(C) Universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.

ARTICLE 56

All members pledge themselves to take joint and separate action in cooperation with the organization for the achievement of the purposes set forth in Article 55.

ARTICLE 57

1. The various specialized agencies established by inter-governmental agreement, and having wide international responsibilities as defined in their basic instruments in economic, social, cultural, educational, health and related fields, shall be brought into relationship with the United Nations in accordance with the provisions of Article 63.

2. Specialized agencies thus brought into relationship with the organization are hereinafter referred to as "the specialized agencies."

ARTICLE 58

The organization shall make recommendations for the coordination of the policies and activities of the specialized agencies.

ARTICLE 59

The organization shall, where appropriate, initiate negotiations among the States concerned for the creation of any new specialized agency required for the accomplishment of the purposes set forth in Article 55.

ARTICLE 60

Responsibility for the discharge of the organization's functions set forth in this chapter shall be vested in the General Assembly and, under the authority of the General Assembly, in the Economic and Social Council, which shall have for this purpose the powers set forth in Chapter X.

CHAPTER X

Economic and Social Council

COMPOSITION

ARTICLE 61

1. The Economic and Social Council shall consist of eighteen members of the United Nations elected by the General Assembly.

2. Subject to the provisions of Paragraph 3, six members of the Economic

and Social Council shall be elected each year for a term of three years. A retiring member shall be eligible for immediate re-election.

3. At the first election, eighteen members of the Economic and Social Council shall be chosen. The term of office of six members so chosen shall expire at the end of one year, and of six other members at the end of two years, in accordance with arrangements made by the General Assembly.

4. Each member of the Economic and Social Council shall have one representative.

FUNCTIONS AND POWERS

ARTICLE 62

1. The Economic and Social Council may make or initiate studies and reports with respect to international economic, social, cultural, educational, health, and related matters and may make recommendations with respect to any such matters to the General Assembly, to the members of the United Nations, and to the specialized agencies concerned.

2. It may make recommendations for the purpose of promoting respect for, and observance of, human rights and fundamental freedoms for all.

3. It may prepare draft conventions for submission to the General Assembly, with respect to matters falling within its competence.

4. It may call, in accordance with the rules prescribed by the United Nations, international conferences on matters falling within its competence.

ARTICLE 63

1. The Economic and Social Council may enter into an agreement, approved by the General Assembly, with any of the agencies referred to in Article 57, defining the terms on which the agency concerned shall be brought into relationship with the United Nations.

2. It may coordinate the activities of the specialized agencies through consultation with and recommendations to such agencies and through recommendations to the General Assembly and to the members of the United Nations.

ARTICLE 64

1. The Economic and Social Council is authorized to take appropriate steps to obtain regular reports from the specialized agencies. It may make arrangements with the members of the United Nations and with the specialized agencies to obtain reports on the steps taken to give effect to its own recommendations and falling within its competence which are made by the General Assembly.

2. It may communicate its observations on these reports to the General Assembly.

ARTICLE 65

The Economic and Social Council may furnish information to the Security Council and shall assist the Security Council upon its request.

ARTICLE 66

1. The Economic and Social Council shall perform such functions as falls within its competence in connection with the carrying out of the recommendations of the General Assembly.

2. It may, with the approval of the General Assembly, perform services at the request of the members of the United Nations and at the request of the specialized agencies.

3. It may perform such other functions as are specified elsewhere in the present Charter and such functions as may be assigned to it by the General Assembly.

VOTING

ARTICLE 67

1. Each member of the Economic and Social Council shall have one vote.

2. Decisions of the Economic and Social Council shall be taken by a majority of the members present and voting.

PROCEDURE

ARTICLE 68

The Economic and Social Council shall set up commissions in economic and social fields and for the promotion of human rights, and such other commissions as may be required for the performance of its functions.

ARTICLE 69

The Economic and Social Council shall invite any member of the United Nations to participate, without vote, in its deliberations on any matter of particular concern to that member.

ARTICLE 70

The Economic and Social Council may make arrangements for representatives of the specialized agencies to participate, without vote, in its deliberations and in those of the commissions established by it, and for its representatives to participate in the deliberations of the specialized agencies.

ARTICLE 71

The Economic and Social Council may make suitable arrangements for consultation with non-governmental organizations which are concerned with matters within its competence. Such arrangements may be made with international organizations, and, where appropriate, with national organizations after consultation with the member of the United Nations concerned.

ARTICLE 72

1. The Economic and Social Council shall adopt its own rules of procedure, including the method of selecting its president.

2. The Economic and Social Council shall meet as required in accordance with its rules, which shall in-

clude provision for the convening of meetings on request of a majority of its members.

CHAPTER XI

DECLARATION REGARDING NON-SELF-GOVERNING TERRITORIES

ARTICLE 73

Members of the United Nations which have or assume responsibilities for the administration of territories whose peoples have not yet attained a full measure of self-government recognize the principle that the interests of the inhabitants of these territories are paramount, and accept as a sacred trust the obligation to promote to the utmost, within the system of international peace and security established by the present charter, the well-being of the inhabitants of these territories, and, to this end:

(a) To insure, with due respect for the culture of the peoples concerned, their political, economic, social, and educational advancement, their just treatment, and their protection against abuses;

(b) To develop self-government, to take due account of the political aspirations of the peoples, and to assist them in the progressive development of their free political institutions, according to the particular circumstances of each territory and its peoples and their varying stages of advancement;

(c) To further international peace and security;

(d) To promote constructive measures of development, to encourage research, and to cooperate with one another and with appropriate international bodies with a view to the practical achievement of the social, economic, and scientific purposes set forth in this paragraph; and

(e) To transmit regularly to the secretary general for information purposes, subject to such limitation as

security and constitutional considerations may require, statistical and other information of a technical nature relating to economic, social, and educational conditions in the territories for which they are respectively responsible other than those territories to which Chapters XII and XIII apply.

ARTICLE 74

Members of the United Nations agree that their policy in respect to the territories, to which this chapter applies, no less than in respect of their metropolitan areas, must be based on the general principle of good-neighborness, due account being taken of the interests and well-being of the rest of the world, in social, economic and commercial matters.

CHAPTER XII

INTERNATIONAL TRUSTEESHIP SYSTEM

ARTICLE 75

The United Nations shall establish under its authority an international trusteeship system for the administration and supervision of such territories as may be placed thereunder by subsequent individual agreements. These territories are hereafter referred to as trust territories.

ARTICLE 76

The basic objectives of the trusteeship system in accordance with the purposes of the United Nations laid down in Article 1 of the present Charter, shall be:

(A) To further international peace and security;

(B) To promote the political, economic, social and educational advancement of the inhabitants of the trust territories, and their progressive development toward self-government or independence as may be appropriate to the particular circumstances of each territory and its peoples and the freely

expressed wishes of the peoples concerned, and as may be provided by the terms of each trusteeship agreement;

(C) To encourage respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language or religion, and to encourage recognition of the interdependence of the peoples of the world; and

(D) To insure equal treatment in social, economic and commercial matters for all members of the United Nations and their nationals, and also equal treatment for the latter in the administration of justice, without prejudice to the attainment of the foregoing objectives, and subject to the provisions of Article 80.

ARTICLE 77

1. The trusteeship system shall apply to such territories in the following categories as may be placed thereunder by means of trusteeship agreements:

(a) Territories now held under mandate;

(b) Territories which may be detached from enemy states as a result of the second World War; and

(c) Territories voluntarily placed under the system by states responsible for their administration.

2. It will be a matter for subsequent agreement as to which territories in the foregoing categories will be brought under the trusteeship system and upon what terms.

ARTICLE 78

The trusteeship system shall not apply to territories which have become members of the United Nations, relationship among which should be based on respect for the principle of sovereign equality.

ARTICLE 79

The terms of trusteeship for each territory to be placed under the trust-

teeship system, including any alteration or amendment, shall be agreed upon by the states directly concerned, including the mandatory power in the case of territories held under mandate by a member of the United Nations, and shall be approved as provided for in Articles 83 and 85.

ARTICLE 80

1. Except as may be agreed upon in individual trusteeship agreements made in accordance with the provisions of this chapter, placing each territory under the trusteeship system, and until such agreements have been concluded, nothing in this chapter shall be construed in or of itself to alter in any manner the rights whatsoever of any states or any peoples or the terms of existing international instruments to which members of the United Nations may respectively be parties.

2. Paragraph 1 of this article shall not be interpreted as giving grounds for delay or postponement of the negotiation and conclusion of such agreements for placing mandated and other territories under the trusteeship system as provided for in Article 77.

ARTICLE 81

The trusteeship agreement shall in each case include the terms under which the trust territory will be administered and designate the authority which shall exercise the administration of the trust territory. Such authority, hereafter called the administering authority, may be one or more states of the United Nations itself.

ARTICLE 82

There may be designated, in any trusteeship agreement, a strategic area or areas which may include part or all of the trust territory to which the agreement applies, without prejudice to any special agreement or agreements made under Article 43.

ARTICLE 83

1. All functions of the United Nations relating to strategic areas, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the Security Council.

2. The basic objectives set forth in Article 76 shall be applicable to the people of each strategic area.

3. The Security Council shall, subject to the provisions of the trusteeship agreements and without prejudice to security considerations, avail itself of the assistance of the Trusteeship Council to perform those functions of the United Nations under the trusteeship system relating to political, economic, social and educational matters in the strategic areas.

ARTICLE 84

It shall be the duty of the administering authority to insure that the trust territory shall play its part in the maintenance of international peace and security. To this end the administering authority may make use of volunteer forces, facilities, and assistance from the trust territory in carrying out the obligations toward the Security Council undertaken in this regard by the administering authority, as well as for local defense and the maintenance of law and order within the trust territory.

ARTICLE 85

1. The functions of the United Nations with regard to trusteeship agreements for all areas not designated as strategic, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the General Assembly.

2. The Trusteeship Council, operating under the authority of the General Assembly, shall assist the General Assembly in carrying out these functions.

CHAPTER XIII

THE TRUSTEESHIP COUNCIL

COMPOSITION

ARTICLE 86

1. The Trusteeship Council shall consist of the following members of the United Nations:

A. Those members administering trust territories;

B. Such of those members mentioned by name in Article 23 as are not administering trust territories; and

C. As many other members elected for three-year terms by the General Assembly as may be necessary to insure that the total number of members of the Trusteeship Council is equally divided between those members of the United Nations which administer trust territories and those which do not.

2. Each member of the Trusteeship Council shall designate one specially qualified person to represent it therein.

FUNCTIONS AND POWERS

ARTICLE 87

The General Assembly and, under its authority, the Trusteeship Council, in carrying out their functions, may:

A. Consider reports submitted by the administering authority;

B. Accept petitions and examine them in consultation with the administering authority;

C. Provide for periodic visits to the respective trust territories at times agreed upon with the administering authority; and

D. Take these and other actions in conformity with the terms of the trusteeship agreement.

ARTICLE 88

The Trusteeship Council shall formulate a questionnaire on the political, economic, social and educational ad-

vancement of the inhabitants of each trust territory, and the administering authority for each trust territory within the competence of the General Assembly shall make an annual report to the General Assembly upon the basis of such questionnaire.

VOTING

ARTICLE 89

1. Each member of the Trusteeship Council shall have one vote.

2. Decisions of the Trusteeship Council shall be taken by a majority of the members present and voting.

PROCEDURE

ARTICLE 90

1. The Trusteeship Council shall adopt its own rules of procedure, including the method of selecting its president.

2. The Trusteeship Council shall meet as required in accordance with its rules, which shall include provisions for the convening of meetings on the request of a majority of its members.

ARTICLE 91

The Trusteeship Council shall, when appropriate, avail itself of the assistance of the Economic and Social Council and of the specialized agencies in regard to matters with which they are respectively concerned.

CHAPTER XIV

THE INTERNATIONAL COURT
OF JUSTICE

ARTICLE 92

The International Court of Justice shall be the principal judicial organ of the United Nations. It shall function in accordance with the annexed statute, which is based upon the statute of the Permanent Court of International Justice and forms an integral part of the present charter.

ARTICLE 93

1. All members of the United Nations are ipso facto parties to the statute of the International Court of Justice.

2. A State which is not a member of the United Nations may become party to the statute of the International Court of Justice on conditions to be determined in each case by the General Assembly upon recommendation of the Security Council.

ARTICLE 94

1. Each member of the United Nations undertakes to comply with the decision of the International Court of Justice in any case to which it is a party.

2. If any party to a case fails to perform the obligations incumbent upon it under a judgment rendered by the court, the other party may have recourse to the Security Council, which may, if it deems necessary, make recommendations or decide upon measures to be taken to give effect to the judgment.

ARTICLE 95

Nothing in the present Charter shall prevent members of the United Nations from entrusting the solution of their differences to other tribunals by virtue of agreements already in existence or which may be concluded in the future.

ARTICLE 96

1. The General Assembly or the Security Council may request the International Court of Justice to give an advisory opinion on any legal question.

2. Other organs of the United Nations and specialized agencies which may at any time be so authorized by the General Assembly, may also request advisory opinions of the court on legal questions arising within the scope of their activities.

CHAPTER XV

THE SECRETARIAT

ARTICLE 97

There shall be a secretariat comprising a secretary general and such staff as the organization may require. The secretary general shall be appointed by the General Assembly on the recommendation of the Security Council. He shall be the chief administrative officer of the organization.

ARTICLE 98

The secretary general shall act in that capacity in all meetings of the General Assembly, of the Security Council, of the Economic and Social Council and of the Trusteeship Council, and shall perform such other functions as are entrusted to him by these organs. The secretary general shall make an annual report to the General Assembly on the work of the organization.

ARTICLE 99

The secretary general may bring to the attention of the Security Council any matter which in his opinion may threaten the maintenance of international peace and security.

ARTICLE 100

1. In the performance of their duties the secretary general and the staff shall not seek or receive instructions from any Government or from any other authority external to the organization. They shall refrain from any action which might reflect on their position as international officials responsible only to the organization.

2. Each member of the United Nations undertakes to respect the exclusively international character of the responsibilities of the secretary general and the staff, and not to seek to influence them in the discharge of their responsibilities.

ARTICLE 101

1. The staff shall be appointed by the secretary general under regulations established by the General Assembly.

2. Appropriate staffs shall be permanently assigned to the Economic and Social Council, the Trusteeship Council, and, as required, to other organs of the United Nations. These staffs shall form a part of the Secretariat.

3. The paramount consideration in the employment of the staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence and integrity. Due regard shall be paid to the importance of recruiting the staff on as wide a geographical basis as possible.

CHAPTER XVI

MISCELLANEOUS PROVISIONS

ARTICLE 102

1. Every treaty and every international agreement entered into by any member of the United Nations after the present charter comes into force shall as soon as possible be registered with the Secretariat and published by it.

2. No party to any such treaty or international agreement which has not been registered in accordance with the provisions of Paragraph 1 of this article may invoke that treaty or agreement before any organ of the United Nations.

ARTICLE 103

In the event of a conflict between the obligations of the members of the United Nations under the present charter and any other international obligations to which they are subject, their obligations under the present charter shall prevail.

ARTICLE 104

The organization shall enjoy in the territory of each of its members such

legal capacity as may be necessary for the exercise of its functions and the fulfillment of its purposes.

ARTICLE 105

1. The organization shall enjoy in the territory of each of its members such privileges and immunities as are necessary for the fulfillment of its purposes.

2. Representatives of the members of the United Nations and officials of the organization shall similarly enjoy such privileges and immunities as are necessary for the independent exercise of their functions in connection with the organization.

3. The General Assembly may make recommendations with a view to determining the details of the application of Paragraphs 1 and 2 of this article or may propose conventions to the members of the United Nations for this purpose.

CHAPTER XVII

TRANSITIONAL SECURITY
ARRANGEMENTS

ARTICLE 106

Pending the coming into force of such special agreements referred to in Article 43, as in the opinion of the Security Council enable it to begin the exercise of its responsibilities under Article 42, the parties to the four-nation declaration, signed at Moscow, Oct. 30, 1943, and France, shall, in accordance with the provisions of Paragraph 5 of that declaration, consult with one another and, as occasion requires, with other members of the organization with a view to such joint action on behalf of the organization as may be necessary for the purpose of maintaining international peace and security.

ARTICLE 107

Nothing in the present charter shall invalidate or preclude action in rela-

tion to any state which during the second World War has been an enemy of any signatory to the present charter, taken or authorized as a result of that war by the governments having responsibility for such action.

CHAPTER XVIII

AMENDMENTS

ARTICLE 108

Amendments to the present charter shall come into force for all members of the organization when they have been adopted by a vote of two-thirds of the members of the General Assembly and ratified in accordance with their respective constitutional processes by two-thirds of the members of the United Nations, including all the permanent members of the Security Council.

ARTICLE 109

1. A general conference of the members of the United Nations for the purpose of reviewing the present charter may be held at a date and place to be fixed by a two-thirds vote of the General Assembly and by a vote of any seven members of the Security Council. Each member of the United Nations shall have one vote in the conference.

2. Any alteration of the present charter recommended by a two-thirds vote of the conference shall take effect when ratified in accordance with their respective constitutional processes by two-thirds of the members of the United Nations including all the permanent members of the Security Council.

3. If such a conference has not been held before the tenth annual session of the General Assembly following the coming into force of the present charter, the proposal to call such a conference shall be placed on the agenda of that session of the General Assembly, and the conference shall be held if so

decided by a majority vote of the members of the General Assembly and by a vote of any seven members of the Security Council.

CHAPTER XIX

RATIFICATION AND SIGNATURE

ARTICLE 110

1. The present charter shall be ratified by the signatory states in accordance with their respective constitutional processes.

2. The ratifications shall be deposited with the Government of the United States of America, which shall notify all the signatory states of each deposit as well as the secretary general of the organization when he has been elected.

3. The present charter shall come into force upon the deposit of ratifications by the Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, and by a majority of the other signatory states.

4. The states signatory to the present charter which ratify it after it has come into force will become original members of the United Nations on the date of the deposit of their respective ratifications.

ARTICLE 111

The present charter, of which the Chinese, English, French, Russian and Spanish texts are equally authentic, shall remain deposited in the archives of the Government of the United States of America. Duly certified copies thereof shall be transmitted by that Government to the Governments of the other signatory states.

In faith whereof the representatives of the United Nations have signed the present charter.

Done in the city of San Francisco the twenty-sixth day of June, one thousand nine hundred and forty-five.

THE FOURTEEN POINTS

President Woodrow Wilson's Fourteen Points were outlined by him in an address to Congress on January 8, 1918.

I. Open covenants of peace must be arrived at, after which there will surely be no private international action or rulings of any kind, but diplomacy shall proceed always frankly and in the public view.

II. Absolute freedom of navigation upon the seas, outside territorial waters, alike in peace and in war, except as the seas may be closed in whole or in part by international action for the enforcement of international covenants.

III. The removal, so far as possible, of all economic barriers and the establishment of an equality of trade conditions among all the nations consenting to the peace and associating themselves for its maintenance.

IV. Adequate guaranties given and taken that national armaments will reduce to the lowest point consistent with domestic safety.

V. Free, open-minded, and absolutely impartial adjustment of all colonial claims, based upon a strict observance of the principle that in determining all such questions of sovereignty the interests of the population concerned must have equal weight with the equitable claims of the government whose title is to be determined.

VI. The evacuation of all Russian territory and such a settlement of all questions affecting Russia as will secure the best and freest coöperation of the other nations of the world in obtaining for her an unhampered and unembarrassed opportunity for the independent determination of her own political development and national policy, and assure her of a sincere wel-

come into the society of free nations under institutions of her own choosing; and, more than a welcome, assistance also of every kind that she may need and may herself desire. The treatment accorded Russia by her sister nations in the months to come will be the acid test of their good-will, of their comprehension of her needs as distinguished from their own interests, and of their intelligent and unselfish sympathy.

VII. Belgium, the whole world will agree, must be evacuated and restored, without any attempt to limit the sovereignty which she enjoys in common with all other free nations. No other single act will serve as this will serve to restore confidence among the nations in the laws which they have themselves set and determined for the government of their relations with one another. Without this healing act the whole structure and validity of international law is forever impaired.

VIII. All French territory should be freed and the invaded portions restored, and the wrong done to France by Prussia in 1871 in the matter of Alsace-Lorraine, which has unsettled the peace of the world for nearly fifty years, should be righted, in order that peace may once more be made secure in the interest of all.

IX. A readjustment of the frontiers of Italy should be effected along clearly recognizable lines of nationality.

X. The peoples of Austria-Hungary, whose place among the nations we wish to see safeguarded and assured, should be accorded the freest opportunity of autonomous development.

XI. Rumania, Serbia, and Montenegro should be evacuated; occupied territories restored; Serbia accorded free and secure access to the sea; and the relations of the several Balkan States to one another determined by

friendly counsel along historically established lines of allegiance and nationality; and international guaranties of the political and economic independence and territorial integrity of the several Balkan States should be entered into.

XII. The Turkish portions of the present Ottoman Empire should be assured a secure sovereignty, but the other nationalities which are now under Turkish rule should be assured an undoubted security of life and an absolutely unmolested opportunity of autonomous development, and the Dardanelles should be permanently opened as a free passage to the ships

and commerce of all nations under international guaranties.

XIII. An independent Polish state should be erected which should include the territories inhabited by indisputably Polish populations, which should be assured a free and secure access to the sea, and whose political and economic independence and territorial integrity should be guaranteed by international covenant.

XIV. A general association of nations must be formed under specific covenants for the purpose of affording mutual guaranties of political independence and territorial integrity to great and small states alike.

THE ATLANTIC CHARTER

The Atlantic Charter was contained in an official statement issued on August 14, 1941, covering the meeting between President Franklin D. Roosevelt and Prime Minister Churchill "somewhere in the Atlantic."

The President of the United States of America and the Prime Minister, Mr. Churchill, representing His Majesty's Government in the United Kingdom, being met together, deem it right to make known certain common principles in the national policies of their respective countries on which they base their hopes for a better future for the world.

First, their countries seek no aggrandizement, territorial or other;

Second, they desire to see no territorial changes that do not accord with the freely expressed wishes of the peoples concerned;

Third, they respect the right of all peoples to choose the form of government under which they will live; and they wish to see sovereign rights and self-government restored to those who have been forcibly deprived of them;

Fourth, they will endeavor, with

due respect for their existing obligations, to further the enjoyment by all States, great or small, victor or vanquished, of access, on equal terms, to the trade and to the raw materials of the world which are needed for their economic prosperity;

Fifth, they desire to bring about the fullest collaboration between all nations in the economic field with the object of securing, for all, improved labor standards, economic adjustment and social security;

Sixth, after the final destruction of the Nazi tyranny, they hope to see established a peace which will afford to all nations the means of dwelling in safety within their own boundaries, and which will afford assurance that all the men in all the lands may live out their lives in freedom from fear and want;

Seventh, such a peace should enable all men to traverse the high seas and oceans without hindrance;

Eighth, they believe that all of the nations of the world, for realistic as well as spiritual reasons, must come to the abandonment of the use of force. Since no future peace can be main-

tained if land, sea, or air armaments continue to be employed by nations which threaten, or may threaten, aggression outside of their frontiers, they believe, pending the establishment of a wider and permanent system of general security, that the disarmament of

such nations is essential. They will likewise aid and encourage all other practicable measures which will lighten for peace-loving peoples the crushing burden of armaments.

FRANKLIN D. ROOSEVELT,
WINSTON S. CHURCHILL.

NOBEL PEACE PRIZE WINNERS

1901, J. Henri Dunant, French; Frédéric Passy, French; 1902, Elie Ducommun, Swiss; Charles A. Gobat, Swiss; 1903, William R. Cremer, English; 1904, Institute of International Law, Belgian; 1905, Bertha von Suttner, Austrian; 1906, Theodore Roosevelt, American; 1907, Ernesto Moneta, Italian; Louis Renault, French; 1908, Klas Pontus Arnoldson, Swedish; Fredrik Bajer, Danish; 1909, Auguste Marie François Beernaert, Belgian; Estournelle de Constant, French; 1910, International Bureau of Peace;

1911, Tobias M. Asser, Dutch; Alfred H. Fried, German; 1912, Elihu Root, American; 1913, Henri La Fontaine, Belgian; 1917, International Red Cross, Swiss; 1919, Woodrow Wilson, American; 1920, Leon Bourgeois, French;

1921, Hjalmar Branting, Swedish;

Christian Lange, Norwegian; 1922, Fridtjof Nansen, Norwegian; 1925, Austen Chamberlain, English; Charles G. Dawes, American; 1926, Aristide Briand, French; Gustav Stresemann, German; 1927, Ferdinand Buisson, French; Ludwig Quidde, German; 1929, Frank B. Kellogg, American; 1930, Lars Olaf J. Soederblom, Swedish;

1931, Jane Addams, American; Nicholas Murray Butler, American; 1933, Sir Norman Angell, English; 1934, Arthur Henderson, English; 1935, Carl von Ossietzki, German; 1936, Carlos Saavedra Lamas, Argentinian; 1937, Viscount of Chelwood Cecil, English; 1938, Nansen International Office for Refugees, Swiss; 1944, International Committee of the Red Cross, Swiss; 1945, Cordell Hull, American.

NOBEL PRIZE AWARDS

The Nobel Prizes are awarded to persons or organizations making outstanding contributions in physics, chemistry, physiology or medicine, literature, and the cause of world peace. The prizes amount to about \$40,000 each. The prize money comes from a fund of \$9,200,000 set up by Alfred Nobel (1833-96), Swedish chemist and inventor of dynamite. The judges

are the Swedish Academy, the Swedish Academy of Sciences, The Carolina Medical Institute (Stockholm), and five members of the Norwegian parliament. For a list of prize winners in physics, chemistry, physiology and medicine, see the section of this book called "The Sciences." For winners in literature see the section "Literature and Language."

WONDERS OF THE WORLD

NATURAL WONDERS

Volcanoes

The two largest volcanoes in the world are in Ecuador in South America: Chimborazo, a volcanic mountain without a crater—rising 20,700 feet, and Cotopaxi which is 19,550 feet in height. Popocatepetl (17,520 feet high) is 40 miles from Mexico City in southern Mexico, and remains moderately active although it has not erupted since 1540. Southwest of Tokyo on the Japanese island of Honshu is Fujiyama, which rises 12,395 feet, and is a center of the religious life of Japan. The only active volcano in the United States is Lassen Peak (10,453 feet in altitude) in Lassen Volcanic National Park in northeastern California. Mount Etna is the highest volcano in Europe, having more than 200 cones—the loftiest of which is 10,750 feet high—on the island of Sicily near the southern coast of Italy. In Martinique, a French colony about 300 miles northeast of the coast of Venezuela, is Mount Pelée which destroyed over 32,000 persons during its eruption in 1902. Mount Vesuvius (3,891 feet in height) is located near Naples in southwestern Italy, and is famous for having buried the city of Pompeii under great masses of lava in 79 A.D. On the island of Hawaii are two notable volcanoes—Mauna Loa, which reaches an altitude of over 17,000 feet, and Kilauea (4,100 feet high) with a crater $2\frac{1}{2}$ miles in diameter. Other volcanoes include Mount Katmai in Alaska, Krakatao on the Dutch island of Sumatra, and Stromboli located in the Lipari Islands northwest of Sicily.

Geysers and Hot Springs

More geysers are found in Yellowstone National Park, in northwest Wyoming, than in any other part of the world; the most famous geyser in the park is Old Faithful, which spouts a column of water 150 feet into the air regularly every 63 minutes. Lassen Volcanic National Park in California contains mud geysers. It is possible to cook eggs over the numerous small geysers of Iceland, which also has many hot springs that have been utilized by the natives for heating purposes. Other noted geysers are a feature of the geography of North Island in New Zealand, and of Japan where hot springs are piped into houses for domestic use. At Hot Springs National Park in Arkansas, 46 steaming springs flow from the slope of Hot Springs Mountain, and are used in the treatment of many ailments. In Wyoming are Mammoth Hot Springs, the Saratoga Mineral Hot Springs, Thermopolis Hot Springs, and Jupiter Terrace—the largest hot spring terrace in the world. The healing waters of Warm Springs, in Georgia, have long been an aid in curing infantile paralysis.

Waterfalls

The highest waterfall in the world is Tuegla, which has a total height of 2,810 feet and is located in Natal in the Union of South Africa. The second largest waterfall in the world is Kukenaam (2,000 feet) in British Guiana in northern South America. Victoria Falls—on the Zambezi River in Rhodesia, South Africa—comprises

four major cataeraets, the highest of which is 347 feet in altitude and 5,300 feet in width. In Yosemite Valley, California, are many impressive waterfalls, including Yosemite Falls—with a total height of 1,620 feet, Ribbon Falls (1,612 feet) and Bridal Veil Falls which drops 620 feet. Niagara Falls, 167 feet high, consists of two cataeraets: the American Falls in western New York State, and the Canadian or Horseshoe Falls in Ontario on the Canadian side of the Niagara River. The principal waterfalls of Canada include Montmorency Falls (250 feet high) in Quebec, and Grand Falls, with a drop of 302 feet, in Labrador. Other famous waterfalls having a height of over 800 feet are Gavarnic in France, Sutherland in New Zealand, Takkakaw in British Columbia, Staubbach and Trummelbach in Switzerland, Vettis in Norway, and King Edward VIII in British Guiana.

Canyons and Gorges

Believed by many to be the most impressive canyon in the world, the Grand Canyon of the Colorado River is located chiefly in northern Arizona and extends for 217 miles, with a width on the rim of from 4 to 18 miles. The canyon reaches a maximum depth of about 5,500 feet below the surrounding plateau. Presenting a scenic variety of colors, the precipices are composed of limestone, sandstone, shale, and other rocks which are among the most ancient known to geologists. Other notable canyons include the Grand Canyon of the Yellowstone in Wyoming, Bryce Canyon in southwestern Utah—famed for its vividly colored pinnacles—Kings Canyon in the mountainous Sierra wilderness of California, Zion Canyon (with a maximum depth of about 2,500 feet) in southern Utah, and the Yangtze Gorges in western China, where the Yangtze River flows through a lofty mountain range between

Iehang and Chungking. A number of deep gorges—the largest of which is more than 20 miles in length and 3 miles in width—are at the bottom of the Atlantic Ocean northeast of Nantucket Shoals.

Caverns

Mammoth Cave, the largest underground cavern in the world, is located in southwestern Kentucky, and contains approximately 100 miles of explored passages. Known as the Temple, the greatest chamber in the cave has a dome 120 feet in height and covers an area of 5 acres. Colossal Cave is in the same region; Ice Cave in Caldwell County, Kentucky, contains ice during the whole year. Carlsbad Caverns in southeast New Mexico—formed by the action of water on limestone—extend for an undetermined distance under the Guadalupe Mountains. The Luray Caverns as well as Endless Caverns in Virginia are famed for their stalactites (rock formations). In the Black Hills of South Dakota, the Pahasaba limestone formation contains Wind Cave and other interesting caverns. Fingal's Cave, located on the island of Staffa near the northwest coast of Scotland, is 227 feet in length and 42 feet wide, and is filled partially with water. The island of Capri, in the Bay of Naples in southwestern Italy, contains a number of impressive caverns including the Blue Grotto which can be entered only by boat.

Glaciers

The largest glaciers in the world are found in Greenland and the Arctic as well as the Antarctic regions. Numerous glaciers are located in Alaska, including the Muir which covers an area of about 1,214 square miles in the southeast, and Malaspina northwest of Yakutat Bay. Glacier National Park in northwestern Montana contains about 60 small glaciers; Mount Rainier National Park in the state of Washing-

ton is partly covered by over 40 square miles of glacier which reaches a maximum thickness of 500 feet. Olympic National Park in northwest Washington is also noted for its many glaciers. In eastern Africa, glaciers are situated on the summits of Kenya Mountain (17,040 feet in altitude), and Kili-manjaro (19,710 feet).

Deserts

The largest desert is the Sahara in northern Africa, covering an area of about 3,000,000 square miles and reaching a maximum altitude of 9,000 feet above sea level. Portions of the Sahara include the Libyan Desert, extending from Egypt to French North Africa, and the Nubian, east of the Nile River. The Great American Desert stretches into Nevada from the western part of Utah, and contains a number of arid mountains. Other notable deserts include the Great Sandy and Gibson in western Australia, the Orshambo in southern Mongolia, the Taklamakan in the Chinese province of Sinkiang, the Thar in the state of Rajputana in India, the Dasht-i-Kavir in northern Iran (Persia), the Rub el Khali in the southern Arabian peninsula.

Mountains

The loftiest peak in the world is Mount Everest, 29,141 feet in height, in the Himalaya Mountains in Nepal between Tibet and India. All attempts to reach the summit have been unsuccessful. Mount McKinley rises 20,300 feet in Mount McKinley National Park

The World's Longest Rivers

River	Outflow	Length in Miles
Mississippi-Missouri	Gulf of Mexico	4,221
Amazon	Atlantic	4,000
Nile	Mediterranean	3,600
Yangtze	North Pacific	3,400
Yenisei	Arctic Sea	3,300
Congo	Atlantic	3,000
Niger	Gulf of Guinea	3,000
Obi	Arctic Sea	2,700
Hoangho	North Pacific	2,600
Lena	Arctic Sea	2,600
Amur	North Pacific	2,500
Paraná	Atlantic	2,450
Volga	Caspian Sea	2,400
Mackenzie	Beaufort Sea	2,300
La Plata	South Atlantic	2,300
Yukon	Behring Sea	2,000
Arkansas	Mississippi	2,000
Madeira	Amazon	2,000
St. Lawrence	Gulf of St. Lawrence	1,800
Rio del Norte	Gulf of Mexico	1,800
São Francisco	Atlantic	1,800
Danube	Black Sea	1,725
Euphrates	Persian Gulf	1,700
Indus	Arabian Sea	1,700
Brahmaputra	Bay of Bengal	1,680
Zambezi	Mozambique	1,600
Ganges	Bay of Bengal	1,500

in southern Alaska, and is considered the highest elevation on the continent of North America. The highest mountains in the United States include Mount Whitney (14,495 feet) in California, Mount Rainier (14,408 feet) in western Oregon, Mount Shasta (14,380 feet) in northern California, and Pikes Peak (14,109 feet) in Colorado. The great Andes mountain range, extending for 4,500 miles along the west coast of South America, contains Aconcagua which rises 22,834 feet. Mont Blanc in the Alps in Europe attains an elevation of 15,781 feet, but the highest European mountain is Elbruz (18,465 feet) in southern Russia between the Black and Caspian seas. On the continent of Africa, the highest point is Mount

HIGHEST AND LOWEST CONTINENTAL ALTITUDES

Continents	Highest Point	Elevation (Feet)	Lowest Point	Below Sea Level (Feet)
North America	Mount McKinley, Alaska	20,300	Death Valley, California	280
South America	Mount Aconcagua, Argentina	22,834	Sea level	...
Europe	Mount Elbruz, Caucasus	18,465	Caspian Sea, Russia	86
Asia	Mount Everest, India-China	29,141	Dead Sea, Palestine	1,290
Africa	Kilbo (Kilimanjaro), Tanganyika Terr.	19,710	Libyan Desert	440
Oceania	Mount Kosciuszko, New South Wales	7,323	Lake Eyre, South Australia	38
Antarctica	Mt. Thorvald Nilson	15,400		

Kilimanjaro, rising to an altitude of 19,710 feet in northern Tanganyika. In southern Asia, the peaks of Kangchenjunga, Makalu, Dhaulagiri, and Nanga Parbat are almost as high as Mount Everest.

Lakes

About 31,820 square miles in area, Lake Superior is the largest fresh water lake in the world, and is the farthest west of the five Great Lakes between the United States and Canada. Great Salt Lake in northwestern Utah is 80 miles in length and from 20 to 50 miles wide; its waters are remarkably buoyant, containing about 14 per cent mineral salts. The largest lakes in Canada include Great Bear (14,000 square miles in area) in the District of Mackenzie, and Great Slave (10,719 square miles), north of Alberta. Africa contains Lake Victoria, covering 27,000 square miles—the second largest lake in the world, lying 3,800 feet above sea level and extending into Tanganyika, Kenya, and Uganda. Lake Tanganyika forms part of the southeastern boundary of the Belgian Congo and has an area of 12,500 square miles. The largest lake in Europe is Lake Ladoga (7,000 square miles) northeast of the Gulf of Finland. Frequently called "The Land of a Thousand Lakes," Finland contains over 40,000 lakes scattered throughout the country. Lake Aral—also known as the Aral Sea—covers 26,000 square miles and lies about 200 miles east of the Caspian Sea in western Asia. Located north of Mongolia, Lake Baikal occupies 13,000 square miles and is ice-bound from November until April.

Oceans

Covering an area of 68,634,000 square miles, the Pacific Ocean is the largest single body of water on the surface of the globe, and reaches a

maximum depth of 35,410 feet near the island of Mindanao in the Philippines. It extends from the Arctic Ocean to the Antarctic, and is bounded by North America, South America, Australia, the Malay Archipelago, and eastern Asia. The Atlantic Ocean covers 41,322,000 square miles including its many branches and arms; it extends from the Antarctic Ocean to the Arctic, and is bounded by North America, South America, Europe, and Africa. Its maximum depth is about 27,965 feet at the Puerto Rico Trench near the island of Puerto Rico. The Indian Ocean, occupying an area of 28,350,000 square miles, lies east of Africa and south of Asia; its greatest depth is approximately 13,000 feet near Christmas Island at latitude 10 degrees south and longitude 108 degrees east.

Located north of the Arctic Circle, the Arctic Ocean extends completely around the world, having an area of about 5,440,000 square miles. On the south it is bounded by the northern reaches of North America, Europe, and Asia. Enclosing the glacial regions around the South Pole is the Antarctic Ocean with an area of approximately 7,500,000 square miles. Neither the Arctic nor the Antarctic oceans have been entirely explored—hence their points of maximum depth are not known.

The Gulf Stream

A warm ocean current, the Gulf Stream originates near the Gulf of Mexico and flows north along the eastern coast of the United States, then across the Atlantic Ocean—passing near Great Britain and the Scandinavian Peninsula—and ending in the Arctic Ocean. The stream moderates the climate of the regions that it approaches, creating a current of warm air that causes dense fog in England by coming into contact with the cold winter air. The Japanese Current is the

"Gulf Stream" of the Pacific Ocean, having its origin in the China Sea near the southeastern coast of Asia. This stream becomes the California Current after crossing the Pacific, and warms the northwestern shores of the United States.

The World's Largest Islands

Name of Island	Ocean or Sea	Area In Sq. Miles
New Guinea (Brit.-Neth.)	Pacific	330,000
Borneo (Brit.-Netherlands)	Pacific	289,000
Madagascar (French)	Indian	236,000
Sumatra (Netherlands)	Indian	178,330
Great Britain	Atlantic	89,125
Honshu (Japan)	Pacific	87,500
Celebes (Netherlands)	Indian	72,000
Prince Albert, &c. (British)	Arctic	60,000
South Island, N. Z. (British)	Pacific	58,500
Java (Netherlands)	Indian	48,400
North Island, N. Z. (British)	Pacific	44,500
Cuba (Independent)	Atlantic	44,000
Newfoundland (British)	Atlantic	42,750
Luzon (U. S. A.)	Pacific	41,000
Iceland (Danish)	Atlantic	40,437
Ellesmere (British)	Arctic	40,000
Mindanao (U. S. A.)	Pacific	37,000
Hokkaido (Japan)	Pacific	36,500
Ireland	Atlantic	32,600
Novaya Zemlya (Russian)	Arctic	30,000
Sakhalin (Russo-Japanese)	Pacific	29,100
Haiti (Independent)	Atlantic	28,200
Tasmania (British)	Pacific	26,215
Ceylon (British)	Indian	25,400
Banks (British)	Arctic	25,000
North Devon (British)	Arctic	24,000
Vancouver (British)	Pacific	20,000
Melville Land (British)	Arctic	20,000
Tierra del Fuego (Argentine)	Atlantic	18,500
Southampton (British)	Arctic	17,800
West Spitzbergen (Norway)	Arctic	15,260
Prince of Wales (British)	Arctic	15,000
Formosa (Japanese)	Pacific	13,500
North Somerset (British)	Arctic	12,000
Sicily (Italian)	Medit.	10,000
Australia		2,974,580
Greenland		827,300

Other Wonders

The Old Man of the Mountain is the profile of a human face formed by a rocky cliff on the perpendicular side of Profile Mountain, overlooking Franconia Notch in the White Mountains of New Hampshire. The broad arch of the forehead is 100 feet in height. Nathaniel Hawthorne brought this image to the attention of the world in his classic story, "The Great Stone Face."

The Rock of Gibraltar is a promon-

tory at the entrance to the Mediterranean Sea, between Spain and Africa. It rises to a height of 1,396 feet. It is noteworthy for its solidity and strategic position.

Death Valley, in southern California, is the hottest and lowest point in North America, being 276 feet below sea level. The terrific heat in this region caused the death of numerous pioneers who first attempted to cross the valley.

The Valley of Tikiterc in New Zealand is a valley of pools of boiling mud, hot springs, and sulphur fumes, called "The Inferno" because of its aspect of horror.

Sinking Creek in Breckinridge County, Kentucky, is a stream which disappears abruptly and follows a subterranean course for an undetermined number of miles, appearing again above the ground as a scenic spring flowing from beneath a small mountain.

Red lakes resembling blood are sometimes produced by rainfall on the Great White Sands, a desert almost entirely composed of pure gypsum near Alamogordo in New Mexico. The Great Salt Plains—located in northwest Oklahoma—cover an area eight miles long and six miles in width, and consist of dazzling white salt.

The Dead Sea, in Palestine, is a salt sea about 46 miles long and 10 miles wide. It lies 1,300 feet below the level of the Mediterranean Sea. Its waters are remarkably buoyant, containing about eight times as much salt as ocean water.

Remarkable skeletons of prehistoric animals and birds have been found in Kansas and Idaho, including the remains of flying reptiles which had a total wing-spread of 25 feet. Other fossils discovered in these areas indicate that tiny horses with three or four toes once lived here.

GREAT EARTHQUAKES

Time	Place	Deaths	Time	Place	Deaths
1693, Sept.	Sicily, Italy	60,000	1910	Cartago, Costa Rica ..	1,500
1703, Feb. 2	Japan	200,000	1915, Jan. 13	Central Italy	29,078
1755, Nov. 1	Lisbon, Portugal	50,000	1923, Sept. 1	Tokyo, Yokohama, Japan	99,331
1783, Feb. 4	Calabria, Italy	60,000	1925, May 23	Japan	381
1797, Feb. 4	Quito, Ecuador	41,000	1931, March 31	Managua, Nicaragua ..	1,000
1868, Aug. 13-15 ..	Peru and Ecuador	25,000	1932, Dec. 26	Kansu, China	70,000
1883, Aug. 25-28 ..	Island of Java	36,000	1933, March 10	Southern California ..	130
1886, Aug. 31	Charleston, S. C.	41	1939, Jan. 24	Central Chile	25,000
1906, April 18-19 ..	San Francisco, Calif. ..	500	1939, Dec. 27	Anatolia, Turkey	50,000
1908, April 17	Formosa Island	Many thous.	1940, May 27	Callao, Lima	350
1908, April 16	Valparaiso, Chile	1,500	1940, July 30	Anatolia, Turkey	1,000
1907, Jan. 14	Kingston, Jamaica	1,400	1940, Nov. 10	Moldavia, Rumania	388
1908, Dec. 28	Sicily and Calabria	76,483	1941, April 15	Colima, Mexico	84

MAN-MADE WONDERS

Great Pyramids of Egypt. Located on the west bank of the Nile River, the pyramids extend for about 60 miles south of Gizeh. They were built during the period from 3500 B.C. to 1800 B.C. to contain the tombs of the Pharaohs. Erected by Cheops (Khufu), the largest rises 450 feet above the desert, is 746 feet square at the base and occupies almost 13 acres; when intact this structure allegedly was composed of over 2,300,000 blocks of diorite or bluestone. There are more than 70 other pyramids, including the second largest which was built by Chephren (Khafra), the famed step-pyramid—the tomb of Zoser—at Saggara, and the tomb of Tut-ankh-Amen south of Luxor.

Colossus of Rhodes. A statue of the Greek sun god Helios (Apollo), 108 feet in height and made of brass or bronze, which was completed by Chares of Lindus in about 280 B.C. The figure stood at the port of Rhodes, on the island of Rhodes in the eastern Mediterranean Sea, and was destroyed by an earthquake in 224 B.C. Another noted colossus was the statue of Nero (110 feet in height) at Rome.

Pharos of Alexandria. A lighthouse of white marble about 400 feet in height, erected by King Ptolemy Philadelphus between 265 and 247 B.C. on the island of Pharos in the harbor of Alexandria, Egypt. Illumination was

provided for mariners by a fire at the top of the tower. The entire structure, which cost an equivalent of \$850,000, was destroyed by an earthquake in 1375 A.D.

Mausoleum of Halicarnassus. A marble tomb built in 352 B.C. at Halicarnassus (now Bodrum) in southwest Asia Minor by Queen Artemisia for her husband Mausolus, king of Caria. It was about 140 feet in height; above an enclosure of 36 Ionic columns rose a pyramid with 24 steps leading to a pedestal on which stood a quadriga (chariot group). The mausoleum was destroyed by an earthquake between the 12th and 15th centuries.

Hanging Gardens of Babylon. Terraced gardens planted by King Nebuchadnezzar in about 600 B.C. near the Euphrates River, south of the present site of Bagdad in Iraq. The walls were allegedly of gold, and the terraces rose from 75 to 300 feet above the ground. Pipes from a reservoir at the top supplied water to the fountains which sprayed the numerous shrubs, vines, flowers, and small trees.

Statue of Zeus at Olympus. A statue carved by Phidias in the 4th century B.C., it was placed in the temple of Olympus in southwestern Greece, where all who attended the Olympian games might pay homage to Zeus, king of the Greek deities. About 58 feet in height, the figure was made of marble,

ivory, and gold, while the throne on which it sat was ornamented with many jewels. Christian invaders destroyed the statue.

Alhambra. A group of buildings, erected chiefly between 1248 and 1354 by the Moorish king Al Ahmar and his successors, on a hill above Granada in northern Spain. Halls and chambers surround a series of rectangular, open courts, which include the Court of Myrtles (138 feet long and 74 feet in width) and the Court of Lions. The latter is enclosed by 124 white marble columns supporting a gallery noted for its ornate, fretted ceilings and filigree work in stucco. Vandals greatly damaged the Alhambra after the Moors were expelled from Spain in 1492.

Taj Mahal. A domed, square mausoleum of white marble at Agra in India, built during the period from 1629 to 1650 by Shah Jahan as a burial place for his favorite wife, Mumtaz-i-Mahal. Set in a garden enclosed by a wall of red sandstone, the structure is 210 feet in height, and rises from a terrace 313 feet square. Portions of the exterior are inlaid with agates, bloodstones, and other jewels. The principal dome—which is 80 feet high and 58 feet in diameter—is directly above the interior tomb chamber.

Temple of Diana at Ephesus. A monument of brightly colored marble, designed by Ctesiphon and built by the Ionians in the 5th century B.C. at the now vanished city of Ephesus, south of Smyrna in western Asia Minor. The temple was 425 feet in length and 225 feet wide; each of the 127 columns supporting the roof was about 60 feet in height, and weighed 150 tons. Herostatus set fire to the building in 356 B.C.

Porcelain Tower of Nankin. An eight-sided pagoda, 261 feet in height, erected in the 15th century by the emperor Yung-lo at Nankin in eastern China. The structure contained eight or nine stories, and from the eaves

hung 152 bells as well as many lanterns. Five enormous pearls were allegedly fastened to chains at the summit, where a golden ball at the top of a rod was encircled by nine iron rings. Taiping revolutionists destroyed the tower in 1853.

Leaning Tower of Pisa. A round, white marble campanile (bell-tower) located at Pisa near the northwest coast of Italy, and containing eight stories enclosed by columns. The tower leans about 14 feet out of the perpendicular, its height being 181 feet on the north side and 179 feet on the south. In 1173 William of Innsbruck and Romano Pisano began the work of construction, which was completed in 1350; clay in the soil caused the tower to tip, and in recent years over 1,000 tons of cement have been injected into the foundation. Other noted leaning towers are at Bologna in northern Italy and St. Moritz in eastern Switzerland.

Stonchenge. A monument of huge stones forming three circles, allegedly erected by a Celtic race of sun-worshippers 4,000 years ago, at Salisbury Plain, 90 miles from London. The average height of the standing stones above the ground is 13½ feet, while the weight of each is more than 20 tons; the outer circle is 100 feet in diameter.

Colossi of Rameses II. Four seated statues of the Egyptian Pharaoh Rameses II, carved from sandstone in about 1270 B.C. and forming part of a temple at Abu-Simbel on the left bank of the Nile River in northern Egypt. The colossi are 70 feet in height. Erected as a monument to the gods of the sun, the temple contains massive colored sculptures as well as two great halls leading to the innermost sanctuary.

Great Sphinx. A stone image of a crouching lion with a human head, located at Gizeh in northern Egypt and allegedly carved in about 3500 B.C. by the Pharaoh Chephren (Khafra). The

total height of the Sphinx is about 66 feet; its body is 189 feet in length, the face measures 13 feet 8 inches across, the nose is 5 feet 7 inches long, and the mouth is 7 feet 7 inches wide. Between the paws—which are 50 feet long and covered with windblown sand—is a roofless temple that was erected as a shrine to the sun god Harmachis.

Great Wall of China. A wall about 1,400 miles in length, made of earth and stone with brick facing, and extending along the boundary between northern China and Mongolia. The work of construction was begun in the 3rd century A.D. by the Chinese emperor Shih Hwang, and the greater part of the wall was erected during the Ming dynasty from 1368 to 1644. At intervals of approximately 100 yards are towers 40 feet high. The base varies in thickness from 15 to 25 feet, the height is from 20 to 30 feet, and the top is about 15 feet in width; along the ridge between the parapets runs a passage 10 feet wide.

Great Buddhist Shrine of Java. An elaborate monument of Buddhist architecture, known as Borobudur and built of volcanic lava in the 9th or 8th century on the island of Java. About 150 feet high, the building consists of seven walls erected in the form of steps; at the top rises a dagoba (cupola) 52 feet in diameter. Each side of the base is 520 feet long. Many spires and pinnacles mark the location of sculptured images of Buddha, and give the shrine the appearance of a huge pin-cushion.

Acropolis at Athens. A hill about 260 feet in height, located at Athens in southeastern Greece near the Gulf of Aegina. At the summit (500 feet in width and 1,150 feet long) are the ruins of numerous temples originally enclosed by Doric and Ionic columns and built of marble—ornamented with Eleusinian blackstone—by Pericles and Cimon in the 5th century B.C. The most notable of these structures in-

clude the Parthenon, which contained a gold and ivory statue of Athena 30 feet in height, the Erechtheum, the Propylaea, the Hephaestum or Thea-seum, and the temple of Athena Nike.

Easter Island Images. Statues of unknown origin, carved from grey volcanic lava and located on Easter Island (Rapanui) in the South Pacific Ocean, 2,000 miles from the South American coast. Varying in height from 4 to 37 feet, the images lie chiefly on stone platforms which are from 200 to 300 feet long and about 30 feet wide.

St. Peter's at Rome. The largest cathedral in the world, covering an area of 18,000 square yards and located in Rome, capital of Italy. The work of construction was begun in 1450 under the direction of Pope Julius II, and completed in 1632. In the center of the piazza stands the great obelisk of Heliopolis. The cathedral's greatest length is 636 feet; its height is 435 feet from the ground to the top of the cross which surmounts the dome. Ornamented with archways and columns, the interior contains an altar 95 feet high as well as a bronze statue of St. Peter, and can accommodate about 54,000 worshippers.

Twin Colossi of Memnon. Two seated images of the Pharaoh Amenhotep III, about 70 feet in height, carved from sandstone in approximately the 14th century B.C. and located near Karnak in northern Egypt. At sunrise these statues emit a moaning noise, which is said to be caused by the action of the sun's heat on the chilled stone; the Greeks believed that this sound represented the whistling of Memnon, the son of Eos (goddess of dawn).

Mayan Temples. Buildings erected by the Mayan Indians, who attained a high stage of civilization in Central America before the birth of Christ. Made chiefly of limestone and mortar, the temples (now in ruins) were built

on lofty, pyramid-shaped terraces, and were frequently ornamented with columns in the form of feathered snakes. Notable remnants of these structures are found at Tikal, Tzibanche, and Quintana Roo in Guatemala, Labaantun near Pusilha in British Honduras, San Andres Tuxtla and Chichen Itza in Mexico, and numerous other towns.

Ancient Greek Theaters. Roofless auditoriums erected in Greece in the 4th century B.C. during the administration of Lycurgus. Originally wooden benches, the seats were later made of stone and placed in circular formation on hillsides that sloped down to the stage. The theater of Dionysus, located beneath the south side of the Acropolis at Athens, could accommodate about 16,000 spectators at one performance.

Mosque of Santa Sophia. A building located at Istanbul (formerly Constantinople) in northern Turkey, and erected by the emperor Justinian in the 6th century. The Turkish sultan Mohammed II made the structure a mosque after conquering the city in 1453. Containing 100 columns (40 on the ground floor and 60 in the galleries), the interior is ornamented with glass mosaics as well as slabs of marble and alabaster; the central dome is 180 feet in height and 107 feet in diameter.

Potala of Tibet. The residence of the dalai lama, who is the ruler of Tibet in southern Asia. Located on Potala hill overlooking the Kyichu River and the town of Lhasa, the structure is over 900 feet in length and resembles a fortress, with many gilded roofs and towers at various levels—the highest being more than 400 feet from the ground. The exterior of the central part of the Potala is red, while the other outside walls are white. Contained in the building are the apartments of the dalai lama, reception rooms and numerous chapels.

Ancient Aqueducts. Structures built before and shortly after the beginning

of the Christian era, to furnish cities with water. One of the first was a tunnel 4,000 feet in length, which was cut by Eupalenus in about 630 B.C. It supplied the people of the Greek island of Samos near the west coast of Asia Minor. Approximately 40,000 gallons flowed each day through nine aqueducts into the city of Rome. Erected by Agrippa in 18 A.D., the Pont du Gard at Nimes (in France) has three tiers of arches rising 160 feet. Aqueducts were also used in ancient times by the inhabitants of Egypt, Babylon, and Jerusalem.

Shwe Dagon Pagoda. A gilded, bell-shaped structure erected in 588 B.C. at Rangoon in southern Burma to contain eight hairs which Buddha presented to some Burmese merchants. The pagoda is closely surrounded by numerous smaller shrines; its base is 1,355 feet in circumference, and the top is encased with goldleaf, supporting many silver bells.

"Palace" of the Cliff Dwellers. An uninhabited village overlooking the river Mancos in Colorado, built by Indians in prehistoric times and containing 200 rooms for domestic life as well as 22 kivas (sacred chambers from 15 to 20 feet in diameter) for religious worship. The "ceiling" is of stone, 50 feet from the top of the Mesa Verde—which is a table-like formation 15 miles long and 8 miles in width. Masonry was used in the construction of the dwellings, and relics indicate that the inhabitants attained a high degree of civilization.

Colosseum of Rome. The ruins of an oval amphitheater, 1,680 feet in circumference, located at Rome in western Italy. The work of construction was begun by Vespasian in 75 A.D. and finished by Titus five years later. Built of marble and concrete with three rows of columns one above the other, the Colosseum (when intact) could accommodate 80,000 spectators at a single performance, and was 157 feet

high, containing an arena 285 feet long and 182 feet wide. Stones were later taken from the building by Pope Paul II and the Gothic ruler Theodorie.

Circus Maximus. An amphitheater erected at Rome by Tarquin in 605 B.C., and enlarged by Julius Caesar. The structure was 1,875 feet long and 625 feet wide, rising to a height of 312 feet, and could accommodate over 150,000 persons. Chariot races, athletic games and similar events were held in the arena.

Colossus of Mysore. A statue 60 feet in height, representing Gomatesvara—a saint of the Hindu religious order of Jains, and carved in 983 A.D. from solid rock on a hilltop that rises 470 feet above a plain in the state of Mysore in southern India. Surrounded by a temple, the image is 26 feet broad at the shoulders and stands on a circular platform.

Khmer Temple. A structure 796 feet long and 588 feet wide, was erected by a civilization that has disappeared, and located near Angkor Thom in southern Indo-China. The largest of five pagodas rises 250 feet above the foundations at the center of the temple. A main gate, reached by a causeway (600 feet in length) across a moat, encloses a series of galleries and courtyards; a flight of 38 stone steps—each two feet thick—leads to the shrine of Vishnu. Ornate bas-relief carvings on the walls depict dancing girls and Naga, the seven-headed holy serpent.

The Empire State Building, in New York City, is the tallest building in the world, reaching a height of 1,250 feet in 102 stories. It is capped by a tower originally designed as an anchor for dirigibles; no craft, however, has ever succeeded in mooring to the tower. The building was completed in 1931. An observation gallery on the 86th floor affords a view of twenty-five miles.

Boulder Dam, on the Colorado

River in Arizona and Nevada, is 727 feet high and 1,180 feet long. It has a storage capacity of ten million gallons of water. Opened in 1935, it is the largest dam in the world, containing 4,400,000 cubic yards of concrete. It was built to provide flood control, irrigation, power, and a water supply.

The Panama Canal, cutting through the Isthmus of Panama, connects the Caribbean Sea and the Gulf of Panama, providing a waterway for over five thousand vessels annually. The Canal measures 50.72 miles in length and varies in width from 300 feet in the Gaillard Cut to 1,000 feet in Gatun Lake. The depth varies from 41 feet to 85 feet. The Canal was opened to traffic in 1914.

The Suez Canal crosses the Isthmus of Suez, which lies between Asia and Africa. It is about 100 miles long, 200 feet wide, and 43 feet deep. It runs from Port Said on the Mediterranean to Suez on the Gulf of Suez, an arm of the Red Sea. The Canal was completed in 1869 at a cost of \$148,500,000. Over five thousand vessels annually pass through the Canal.

The Simplon Tunnel, which runs through the Alps between Switzerland and Italy, is a railroad tunnel 12½ miles long. Completed in 1905, it is the longest railroad tunnel in the world. It was built at a cost of twenty-one million dollars.

The Statue of Liberty, on Bedloe's Island in the harbor of New York City, was presented to the American people by the French government on the hundredth anniversary of American independence. It is the work of the sculptor Frédéric Bartholdi. The statue, of a robed female figure holding aloft the flaming torch of liberty, rises 310 feet above the harbor. The statue is hollow, made of metal 3-32 of an inch thick and weighing 225 tons. A stairway runs inside the figure almost to the top. At the base of the

figure is inscribed a poem by Emma Lazarus.

The Tennessee Valley Authority, established in 1933, operates 18 dams on the Tennessee River and its tributaries which produce 2,100,000 kilowatts of electric power, and carries on a widespread program of fertilizer production. It has made the Tennessee River navigable and has conducted an educational campaign among the farmers of the valley to improve their methods of farming. The electricity produced by the TVA is sold at wholesale rates to 80 municipalities, 3 counties, 45 co-operatives, and 22 privately owned utility companies, which in turn distribute the power to 500,000 consumers.

The World's Tallest Buildings

Location	Stories No.	Height Feet
New York City		
Empire State	102	1,250
Chrysler	77	1,046
60 Wall Tower	66	950
Bank of Manhattan	80	927
RCA, Rockefeller Center	70	850
Woolworth	60	732
Metropolitan Life	50	700
No. 500 Fifth Ave.	60	697
City Bank Farmers Tr.	54	686
Chamlin	50	680
Lincoln	53	673
Irving Trust	50	646
Waldorf-Astoria	47	625
No. 10 East 40th St.	48	620
General Electric	50	616
Singer	47	612
New York Life	40	610
U. S. Court House	37	590
Municipal	24	589
Cleveland		
Terminal Tower	53	708
Chicago		
Board of Trade	44	612
Paris		
Eiffel Tower .....	..	985

THE PEOPLE OF THE WORLD

World Population and Area

The total population of the world in 1939 was estimated as 2,169,868,000; its total area is 51,230,217 square miles.

The population of Africa was 157,330,000; its area, 11,710,424 square miles.

The population of Asia (excluding the Union of Soviet Socialist Republics) was 1,154,000,000; its area, 10,347,491 square miles.

The population of Europe (excluding the Union of Soviet Socialist Republics) was 402,800,000; its area, 2,092,664 square miles.

The population of the Union of Soviet Socialist Republics was 172,000,000; its area, 8,176,061 square miles.

The population of North America was 184,255,000; its area, 8,664,860 square miles. (To these figures Mexico and the Caribbean region contributed

40,080,000 population and 1,068,000 square miles.)

The population of South America was 88,680,000; its area, 6,937,551 square miles.

The population of Oceania was 10,803,000; its area, 3,301,158 square miles.

Religious Population of the World

Catholic, Protestant, Mohammedan, and Jewish adherents throughout the world were estimated in 1939 as 841,576,479 persons. The total population of the world at that time was estimated as 2,169,868,000.

The number of Catholic adherents was 470,405,649. Of these, 342,775,663 were Roman Catholics, and 127,629,986 were Orthodox, or Eastern, Catholics. Orthodox Catholics include Russian, Greek, Albanian, Bulgarian, Rumanian, Serbian, Armenian, and Coptic Catholics.

The number of Protestant adherents was 135,000,893.

The Mohammedan population was 220,978,848.

The number of Jews, including Jews by birth, not necessarily by religion, was 15,192,089.

The number of Protestants who were not regular communicants, of devotees of "heathen" and so-called philosophic religions (such as Buddhism and Shintoism), of the unchurched, unclassified, and unknown, was estimated as 1,318,914,254.

Principal Languages of the World

The actual number of languages spoken and written in the world is estimated by the French Academy as 2,796.

The English language is used by more than 270,000,000 people. Of these, 150,600,000 are citizens of the United States or inhabitants of its territories, 1,000,000 are Liberians, and 118,500,000 are either citizens of Great Britain and its dominions or inhabitants of its dependencies.

The Chinese language and its dialects are used by nearly 500 million people.

Hindu and Indian dialects are used by nearly 331 million people.

The Russian language and its dialects are used by 166 million.

The Spanish language is used by nearly 103 million.

African dialects are used by more than 93 million.

Next in order come: Japanese, used by 97 million; German, 78 million; French, 68 million; Portuguese, 49 million; Italian, 44 million; Javanese, 42 million; Polish, 32 million; Arabic, 29 million.

Many attempts have been made to create "universal" languages. The best known of these are probably Volapuk and Esperanto. The former was invented in 1879 by Johann M. Scheyer, a German; the second by Dr. L. L.

Zamenhoff, of Warsaw, in 1887. "Basic English," ingeniously organized by a Cambridge (Eng.) scholar, C. K. Ogden, in 1930, has been widely discussed both in England and America.

The Races of Man

The term "race" is used today to specify one of the three main groups of man, the Caucasian, the Mongoloid, and the Negroid. These groups have been defined on the basis of such physical characteristics as skin color, shape of the eyes, hair types, amount of hair, and shape of the head. The nature of one of these characteristics is not considered sufficient to determine the race of a group of people. Thus, the natives of India, although their skin may be as dark as that of the American Negro, are generally classified as Caucasians because of the presence of other characteristics such as straight hair and the shape of the features.

Race is not determined by the language, culture, or religion of a people. It is incorrect to speak of an "Aryan race" or a "Jewish race" or an "Italian race." "Aryan" refers to an Indo-European language. "Jewish" refers to a religion. "Italian" refers to a nationality.

No evidence has been produced to show that one race is superior in intelligence or physical ability to another.

The Caucasian race, which inhabits Europe and a great part of the Near East and India, is divided into three sub-races, the Nordic, the Alpine, and the Mediterranean. The Nordics are fair-skinned, blue-eyed, tall, and long-headed. They are found in northern Europe. The Alpines are of medium skin color, are stocky in build, and are broad-headed. They inhabit the middle area of Europe. The Mediterraneans are more slender and darker than the Alpines and are long-headed. They inhabit southern Europe.

The Mongoloid race is divided into two sub-races, the Old World Mon-

goloids and the New World Mongoloids. The Old World Mongoloids have small, narrow noses, thin lips, oblique eyes, straight, lank hair, and sparse body and face hair. Their skin is yellow and yellowish brown. Among the Old World Mongoloids are the inhabitants of eastern Asia, the Lapps of northern Europe, and the inhabitants of the large islands off the southeastern coast of Asia and the small islands to the east. The New World Mongoloids have high, thin noses, straight eyes, reddish-brown skin, and hair that is straight and sparse on the body. The Indians of the Western Hemisphere belong to this sub-race.

The Negroid race is characterized by a broad, flat nose, thick lips, straight eyes, protruding jaw, kinky hair, and dark skin varying in degrees of brownness. Negroids are found in Africa south of the Sahara Desert, Madagascar, Tasmania, and the islands northeast of Australia.

There are three groups of people that do not fit any of the racial categories. These are the aborigines of Australia, who are as hairy as Europeans, but live in an area where other peoples have little body hair; the Ainu of northern Japan, who have certain Caucasian features; and the Polynesians who inhabit the islands of the eastern Pacific and who appear to be a mixture of races.

Some Peoples of the World

APACHES. Nomadic Indian tribes now living in Arizona and New Mexico.

AZTECS. Founders of the pre-Hispanic civilization of Mexico.

BASQUES. Inhabitants of a region on the Franco-Spanish border who are probably a mixture of several racial types. It is impossible to trace the origins of their language, which is the only non-Aryan language now spoken in Europe.

BEDOUINS. Semitic nomads of Arabia and North Africa.

BERBERS. The most numerous native people of northwest Africa. They are a mixture of European, Arabian, and Negro strains. Their language is closely related to ancient Hamitic. They are Mohammedan in religion.

BUSHMEN. Primitive Negroid people of South Africa.

COSSACKS. Inhabitants of the eastern and southern frontiers of Russia, especially along the Don and Dnieper rivers.

CROATIANS. A southern Slavic people closely related to the Serbs.

ESKIMOS. Inhabitants of the Arctic regions of North America and northeastern Asia. They are believed to be descended from the same stock as the American Indians. Although widely distributed geographically, there is great similarity in their language and culture.

GYPSIES. A wandering people generally believed to be the remnants of a tribe from India. Their language is derived from Sanskrit. There are great gypsy centers in Hungary and Rumania.

HAMITES. Dark-skinned, but non-Negroid inhabitants of northeast Africa.

HOTTENTOTS. Negroid people living in southwest Africa.

INDIANS. The name given by Columbus to the people he found in the western world. They are copper-colored, have dark, straight hair. They are believed to have descended from the people of northeastern Asia.

MAGYARS. Inhabitants of central Hungary, believed to be of Tatar descent. Their language is a Finno-Ugrian tongue.

MALAYS. A brown-skinned race found in the Malay Peninsula, the East Indies, the Philippines, and other Pacific islands. They have both Mongoloid and Caucasian elements. Many are Mohammedans.

MAORIS. Civilized Polynesians who inhabit New Zealand.

MELANESIANS. Negroid inhabitants of the island of Melanesia, northeast of Australia.

MOORS. The people of Morocco. They are dark-skinned, with Berber and Arabic strains. They are Moslems in religion.

NEGRILLOS. A Negroid people with yellowish skin who are found in the African Congo.

NEGRITOS. Pygmy Negroids of the Philippines, the Andaman Islands, and the Malay Peninsula.

POLYNESIANS. Brown inhabitants of the most easterly of the Pacific islands.

They are among the tallest people of the world, averaging 5 feet, 10 inches.

SLAVS. The name applied to the inhabitants of central and eastern Europe, now including the Russians, Bulgarians, Serbians, Croats, Slovenians, some Hungarians, Czechs, Slovaks, and Poles. They are related by language rather than race.

TATARS. (Also known as Tartars.) Descendants of the Golden Horde, led by a grandson of Genghis Khan, which overran Russia, Poland, and Hungary in 1237 and later. They inhabit a region of the U.S.S.R. They speak a dialect of Turkish and are Mohammedan in religion.

INDUSTRIES OF THE WORLD

Grain Crops of the World

Wheat led all other crops throughout the world in 1942, with a total of 5,800 millions of bushels harvested. Next came corn (5,350 million bushels), and after that oats (4,810 million bushels), barley (2,600 million bushels), and rye (1,450 million bushels).

World Production of Rubber

The world production of rubber in 1940 was 1,390,661 long tons. Of these, 1,353,052 long tons came from Asiatic sources (India, Ceylon, the Malayan peninsula, the Netherlands Indies, etc.); 17,661 from the Amazon Valley; 3,634 from the Mexican guayule region; and 16,314 from tropical Africa.

At the beginning of the Second World War, the United States was using about half the world's rubber.

Synthetic Rubber

When Japanese armies overran the Malayan peninsula and the Netherlands Indies in 1942, thus cutting off

about 90% of America's normal supplies of crude rubber, American chemists and engineers developed synthetic rubber to fill the gap.

The best known and most reliable of the synthetic rubbers is Buna-S, made from butadiene, which has two sources, petroleum and grain alcohol. In 1943 the output of Buna-S was about 270,000 long tons. By 1944 the figure had expanded to about 700,000 long tons.

World Gold Production

The money value of gold mined in the United States and the Philippines in 1943 was about one-seventh of the money value of gold mined throughout the world. The figures were: \$147,783,000 for the United States and the Philippines; \$1,038,065,000 for the world. These figures are based on a valuation of fine gold at \$35 per ounce.

Production of gold by countries in 1943 was: South Africa, \$448,153,000; Rhodesia, \$23,009,000; West Af-

rica, \$19,740,000; Canada, \$127,829,000; United States and Philippines, \$147,783,000; Colombia, \$19,789,000; Nicaragua, \$7,715,000; Chile, \$6,081,000; Australia, \$28,490,000; British India, \$8,820,000.

The money value of gold mined in Soviet Russia in 1938, the latest year reported, was about \$180,000,000.

The money values of gold mined in Japan in 1937 and in Mexico in 1942 were \$25,065,000 and \$30,000,000 respectively.

The gold in the U.S. Treasury, \$19,963,090,869, on June 30, 1940, would have made a bar about 50 feet long, 30 feet wide, and 21 feet thick.

A government gold storage vault has been built at Fort Knox, Ky., and gold was removed there from New York and Philadelphia in 1937.

A second gold storage vault at San Francisco is built on solid rock in a 5-story streamlined building, and was dedicated in May, 1937.

Gold Reserves of Central Banks and Governments

The value of the gold reserves of the United States in 1943 was more than 10 times as large as the value of the gold reserves of any other country. The figure was \$21,938,000,000. France ranked 2nd with gold reserves valued at \$2,000,000,000. Next in order came Switzerland (\$964,000,000); Argentina (\$939,000,000); Belgium (\$734,000,000); South Africa (\$634,000,000).

Railways of the World

The average miles operated by U.S. railways in 1938 were more than four times as many as those operated in any other country. The exact figure was 236,842. In the same year U.S. railways carried 454,508,000 passengers and 819,733,000 carloads (short tons) of freight.

Russia in 1937 had an average of 53,163 miles of railway in operation; carried 1,142,000 passengers and 570,225,000 carloads.

India in 1938 had an average of 41,076 miles in operation; carried 521,285,000 passengers and 97,764,000 carloads.

German railways, state-operated and including Austria and Sudetenland, had in 1938 an average of 38,107 miles in operation; carried 2,041,700,000 passengers and 545,306,000 carloads.

France in 1937 had an average of 26,528 miles in operation; carried 627,473,000 passengers and 272,090,000 carloads.

Great Britain in 1937 had an average of 20,080 miles under operation; carried 1,295,404,000 passengers and 355,832,000 carloads.

Japanese railways (state-operated) in 1938 had an average of 10,784 miles in operation; carried 1,058,631 passengers and 98,483,000 carloads.

Italian railways (state-operated) in 1938 had an average of 10,173 miles in operation; carried 103,046,000 passengers and 55,430,000 carloads.

THE HOME

HOME PLANNING

Buying a Home

In buying a home it is important to ascertain whether the prospective home meets certain standards as far as comfort, privacy, and safety are concerned. These standards are outlined below in the form of a check list of questions that should be answered before the purchase is completed.

Does the design of the house make the most efficient use of the building area?

Is the house situated within easy distance of shopping facilities or schools, if there are children in the family?

Are the grounds attractive?

Does the house contain a sufficient number of rooms for the family?

Is the house in good physical condition? If the house has "settled" are the plumbing and cooking facilities in workable shape?

Are the supporting timbers of the building in good condition?

Are the masonry walls in good condition? How much repair work is necessary?

Is the roof fireproof?

Is the roofing surface waterproof?

How well is the house insulated?

Is there weather-stripping on the windows?

In what condition are the window cords?

Is the basement or cellar dry?

Are the stairs firm and secure? Is there a handrail along the entire length of the stairs?

Are the inside walls in good condition? Are there cracks in the plaster?

If the walls are painted, can they be washed or dusted easily?

In what shape are the floors?

Are there sufficient lighting fixtures?

Is the electric wiring sufficiently insulated?

Are there enough additional lighting outlets? Can other outlets be installed without overloading the electric circuits?

Are the rooms arranged for convenient use? Is there enough natural light in all the rooms?

Is the bathroom easily available to all the rooms?

Is there cross ventilation in the house?

What kind of heating system is installed in the house? Is it economical of fuel? Could a more economical system be easily installed?

If there is a fireplace, is it fireproof?

What is the source of the water supply? Is it from a city reservoir, a well, or a stream?

Is the pressure of the hot and cold water equal?

Is the draining and sewage system in good order?

Are there insect pests in any of the rooms? If so, can they be easily eliminated?

Renting an Apartment

Many of the questions listed under "Buying a Home" apply to renting an apartment. However, there are cer-

tain special questions that apply to renting an apartment.

What kind of property is next door? Will it be noisy when the family wants to sleep? Does it give off any disagreeable odor?

Is the apartment sufficiently sound-proofed to keep out noises from other apartments?

Is there any means of identifying visitors at the door of the house?

Are the locks on the apartment door secure?

Is there ample closet space?

Is there efficient refrigeration?

If there is elevator service, is it limited to a certain time?

Are there facilities for washing clothing?

Is the house fireproof?

What facilities are there for garbage disposal?

What janitor services are provided?

Interior Decoration

Interior decoration is the art of making a home beautiful and livable. The principles of interior decoration may be applied equally to a large mansion or to a small city apartment. Good interior decorating takes into account the needs of the family occupying a home, the size of the home, and tries to apply the universal principles of unity of style, color, and proportion.

The first principle to be considered should be the utility of an apartment or room. If, for example, there are many small children in a family, light-colored furniture and furniture fabrics which are easily soiled would be a doubtful choice. Or, if a certain room were to be used as a library, the first consideration would be enough light at certain places in the room and enough wall space for book shelves. Again, if it is necessary to use one room as both a living room and a dining room, the furniture should be selected and arranged with this aim in

view. You would not, in this case, have a large, formal dining room table that could not also be used for other purposes. A better choice would be one that could be used for other, more informal purposes as well.

As for the actual design of the home, the size and arrangement of the rooms should be considered. If the rooms are rather small, dark wall colors should be avoided, for they would tend to emphasize the smallness. Light shades should be used in this case. Wise use of mirrors on the walls would add to the illusion of space. On the other hand, if the rooms are large for the amount of furniture, darker colors could be used for the walls.

The choice of a style of furniture for a room or house is a matter of taste, but unity of style should prevail. If you have several pieces designed in the ornate style of certain French or English periods, it would not be wise to have other pieces in the simple, unadorned modern style in the same room. This would apply not only to the main pieces in a room but to accessories such as lamps, small tables, and draperies as well.

Not only the choice, but the arrangement of the furniture should be considered. Every room should have a center of interest. This might be a piece of furniture, a bay window, or a fireplace. The center of interest should be of a size proportionate with the other objects in the room. In a room filled with heavy objects, for example, the center of interest should not be a small, delicate coffee table.

In any room, in any style, over-decoration should be avoided. A home should look like a home and not a museum. A few decorative objects strategically placed give more of an impression of completeness than many knick-knacks scattered helter-skelter throughout the room.

Light presents a problem in many homes. Most rooms receive sunlight

only a part of each day and, therefore, the use of each room during the day should be considered. The most frequently used room in a house is the kitchen and it should get all the natural light possible. The least used room is probably the dining room, so this can be placed on the shadier side of the house. The room used by the children should have as much sunlight as

possible. The placing of artificial lighting units should follow first the principle of utility and then of design. There should be plenty of light near places used for reading. Individual lamps are better for this purpose than one overall light source. The placement of lamps around the room will also add to the warmth of the room and will help in giving the effect of size.

HOME FINANCES

Mortgages

One of the most common ways of financing the purchase or extensive repair of property is through a mortgage. Technically speaking, the title of a piece of property is given as security for the loan and actual ownership does not pass to the lender. Usually the principal and interest on the mortgage are paid out, or amortized, over a long period of time. Mortgages today may be secured from a bank or through the Federal Housing Authority. In the case of an FHA loan, it is the local bank that makes the actual loan, against the FHA's insurance against loss. The advantages of FHA mortgages are that their interest rates are low and that their period of amortization is long. In addition, homes built or repaired under FHA mortgages must conform to certain specifications as far as sound construction and suitability to the neighborhood are concerned.

Another type of mortgage is the chattel mortgage, which is a loan secured by some personal property. One common type of chattel mortgage is the loan made by a pawnbroker with jewelry or other valuables as security.

Taxes

Taxes are those charges which are levied on persons or corporations to defray the cost of government. In the

early history of the United States there were relatively few forms of taxes, but today, with the great increase in the expenses of government, the kinds of taxes have increased and the number of people called upon to pay them has grown proportionally. Some of the taxes levied by the federal government are: excise tax, customs duty, income tax, luxury tax, sales tax (on gasoline). Some of the taxes levied by state and local governments are: property tax, water tax, income tax, sales tax, poll tax, inheritance tax, liquor tax, and corporation tax.

Insurance

Life Insurance. There are three types of life insurance: ordinary, industrial, and group. Ordinary insurance is usually in multiples of \$1,000, premiums of which are payable quarterly, semi-annually, or annually. Most companies require medical examinations for this type. Industrial insurance is usually for \$500 or less and payments are made weekly or monthly to a collector. The cost of this insurance is about fifty per cent more than ordinary insurance. Group insurance is issued to cover a group of at least fifty people in a common organization. Premiums are paid in a lump sum and no physical examination is required.

Accident Insurance. Many insurance

companies issue policies that pay specified sums to persons injured in the line of work, or anywhere.

Health Insurance. The most common form of this type is the group policy whereby a large number of persons may insure themselves and their families against medical costs of a specified nature. Individual policies of this nature may also be bought.

Burglary Insurance. Insurance against theft may be taken on such possessions as furnishings, jewelry, clothing, silverware, etc.

Fire Insurance. Protects against loss or damage by fire.

Automobile Insurance. Protects against loss by fire, theft, and accident.

Annuities. The purpose of this type of insurance is to provide a regular monthly income beginning at a certain date and continuing for life.

The Family Budget

While each family's expenditures will vary, there are certain general suggestions which can be used as guides in drawing up a family budget. The following nine categories have been found to apply to most families:

Rent. This item should take no more than twenty-five per cent of the

income or twenty per cent if heat is not included. If you are considering buying a house you should limit its cost to two and a half times your yearly income.

Food. One-third of the income is a good average, although this percentage will decrease as the family income rises.

Clothing. From ten to fifteen per cent. This allows for new clothing as well as for repairs and cleaning. In purchasing large clothing replacements, try to stagger them so that they do not fall within the same year.

Operating Expenses. This includes heat, light, telephone, etc. From ten to fifteen per cent.

Automobile. Unless the family income is at least \$2400 the family should not attempt to operate a car.

Development. This includes recreation, club or lodge dues, education, etc.

Health. Includes costs of medicines, dental, and medical care.

Miscellaneous Items. Includes insurance, taxes, personal grooming such as barber and beauty costs, etc.

Savings. Some provision should be made against a day of decreased earnings.

FOOD AND DIET

Handy Kitchen Measurements

- 2 cups equal one pint.
- 4 cups equal one quart.
- 16 tablespoons equal one cup.
- 3 teaspoons equal one tablespoon.
- 1 square of chocolate equals one ounce.
- 2 cups of sugar equal one pound.
- 2 cups of lard or butter equal one pound.

Calorie Allowances

The heat energy of the food we eat is measured in terms of calories. An

adult man should consume food with a caloric yield of between 2500 and 4500 a day; an adult woman, between 2100 and 3000 a day; a child over 12 years, 2800 to 3800 a day; and a child under 12 years, between 1200 and 2500 a day.

The following are portions of some common foods which yield 100 calories:

2 small slices of rye bread, 1 muffin, 1 roll, 1 small slice of wheat bread.

6 tablespoonfuls of farina, 7 of oatmeal.

1½ cubic inches of American or cream cheese.

1 egg.

1 tablespoonful of butter.

3 tablespoonfuls of wheat flour.

1 banana, 1 large apple, 1 medium orange.

1 strip of bacon.

1 medium-sized mutton chop.

5 ounces of milk.

4 teaspoonfuls of granulated sugar.

8 tablespoonfuls of green beans.

4 tablespoonfuls of creamed corn.

1 medium-sized baked potato, 3 tablespoonfuls of mashed potato.

4 tablespoonfuls of baked macaroni.

Planning Meals for the Family

The Department of Agriculture has worked out the guide to the planning of meals for the family that is printed below. The meals may be prepared at a moderate cost. At price levels prevailing in September, 1944, a family of two adults could be fed for from \$10 to \$12 a week and one of four persons at from \$16 to \$18 a week on the basis of this plan. The home maker should enter the name of each member of the family in the appropriate place in the left-hand column and, by totaling each column, can find out what she must buy for a week.

WEEKLY QUANTITIES OF FOOD FOR EACH MEMBER OF THE FAMILY

FAMILY MEMBERS	Milk	Potatoes, sweet-potatoes	Dry beans and peas, nuts	Citrus fruit, tomatoes	Green, yellow vegetables	Other vegetables and fruit	Eggs	Meat, poultry, fish	Flour, cereals ²	Fats and oils	Sugar, syrups, preserves
	Qt.	Lb. Oz.	Lb. Oz.	Lb. Oz.	Lb. Oz.	Lb. Oz.	No.	Lb. Oz.	Lb. Oz.	Lb. Oz.	Lb. Oz.
Children under 12 years:											
9-12 months.....	7	0 1 8	.....	2 0 0	1 1 8	0 0 8	5	0 2 2	0 1 8	0 1 1	0 1 1
1-3 years.....	6	0 1 8	.....	1 1 12	2 1 0	2 1 0	6	0 1 8	1 1 4	0 1 4	0 1 2
4-6 years.....	5	0 1 4	0 1 1	1 1 8	2 1 0	2 1 0	6	1 1 0	1 1 12	0 1 6	0 1 8
7-9 years.....	4	0 1 8	0 1 1	1 1 8	2 1 0	3 1 0	6	1 1 8	2 1 4	0 1 10	0 1 8
10-12 years.....	6	2 1 0	0 1 2	1 1 12	2 1 0	3 1 0	6	2 1 0	3 1 0	0 1 12	0 1 12
Girls:											
13-15 years.....	6	3 1 0	0 1 2	1 1 12	2 1 0	3 1 0	6	2 1 8	4 1 0	0 1 14	0 1 12
16-20 years.....	5	3 1 0	0 1 2	1 1 12	2 1 0	3 1 0	6	2 1 8	3 1 0	0 1 12	0 1 10
Women:											
Moderately active...	4½	2 1 8	0 1 4	2 1 0	3 1 8	4 1 0	5	2 1 8	3 1 0	0 1 12	0 1 12
Very active.....	5½	3 1 8	0 1 6	2 1 0	3 1 8	4 1 8	5	2 1 8	4 1 0	0 1 14	0 1 15
Sedentary.....	4½	2 1 8	0 1 4	2 1 0	3 1 8	4 1 0	5	2 1 8	3 1 4	0 1 10	0 1 12
Pregnant.....	7	3 1 0	0 1 8	2 1 0	4 1 0	4 1 0	6	3 1 12	2 1 8	0 1 12	0 1 12
Nursing.....	10½	3 1 0	0 1 4	2 1 0	4 1 0	4 1 8	6	3 1 0	2 1 8	0 1 12	0 1 12
Boys:											
13-15 years.....	6	3 1 8	0 1 4	2 1 0	3 1 0	4 1 0	5	2 1 8	4 1 8	1 1 0	0 1 12
16-20 years.....	6	4 1 8	0 1 8	2 1 0	3 1 0	4 1 0	5	2 1 8	6 1 0	1 1 4	0 1 12
Men:											
Moderately active...	5	3 1 0	0 1 4	2 1 0	3 1 8	4 1 0	5	3 1 0	4 1 8	1 1 0	0 1 12
Very active.....	6	5 1 8	0 1 8	2 1 0	3 1 8	5 1 0	5	3 1 0	8 1 8	1 1 10	0 1 15
Sedentary.....	5	2 1 8	0 1 4	2 1 0	3 1 8	4 1 0	5	2 1 8	3 1 0	0 1 14	0 1 12
Total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹Or its equivalent in cheese, evaporated milk, or dry milk.

²Count 1½ pounds of bread as 1 pound of flour.

Vitamins

Vitamins are chemical substances which are vital to certain body functions and which are found in certain foods. They have been prepared synthetically in pill and liquid form to be taken by persons whose diets contain insufficient vitamins. The important facts about each of the vitamins are given below:

Vitamin A. Promotes growth and is necessary for the development of the epithelial tissues of the body; prevents night blindness. Is found in milk, eggs, butter, and fish liver oils; leafy green and yellow vegetables; tomatoes; apricots, yellow peaches, bananas, cantaloupes, and oranges.

Vitamin B₁. Is associated with the functioning of the nervous system. Extreme lack causes beri-beri. Is found in whole grains, legumes, lean pork, chicken, and glandular meat organs. Also egg yolk, lean beef, mutton, codfish, and sardines.

Vitamin B₂. Also called riboflavin or vitamin G. Essential for growth and for healthy condition of the skin. Found in many foods, especially dairy products (except butter).

Niacin (Nicotinic Acid). Prevents pellagra. Is found in lean meats, chicken, liver, green leafy vegetables, legumes, and tomato juice.

Vitamin C. Helps to build strong bones and teeth, to keep the teeth in good condition, to build strong walls of the blood vessels; assists in healing wounds. Is found in citrus fruits, tomatoes, and green leafy vegetables.

Vitamin D. Helps prevent rickets. Best source is sunshine. Also found in fish liver oils, milk, and egg yolk.

Vitamin E. Little known about its value except that it is related to the reproductive functions. Is found in wheat germ, eggs, vegetable oils, and green leaves.

Vitamin K. Necessary for normal blood clotting. Is found in leafy green vegetables and milk and milk products.

In order to preserve the vitamin and mineral content of food in cooking, certain simple rules should be followed:

1. Don't cook green vegetables with baking soda.
2. Don't stir air into foods while cooking.
3. Bring foods to a boiling temperature as rapidly as possible.
4. If possible, avoid long cooking processes like stewing.
5. Don't fry foods that are rich in vitamins A, B₁, or C.
6. Use as little water as possible in cooking.
7. Let foods cool before straining them.

WEIGHT AND HEIGHT TABLES

WOMEN									MEN							
Hgt. 4'11"	Hgt. 5'	Hgt. 5'1"	Hgt. 5'2"	Hgt. 5'3"	Hgt. 5'4"	Hgt. 5'5"	Age Group		Hgt. 5'	Hgt. 5'1"	Hgt. 5'2"	Hgt. 5'3"	Hgt. 5'4"	Hgt. 5'5"	Hgt. 5'6"	Hgt. 6'1"
Wgt.	Wgt.	Wgt.	Wgt.	Wgt.	Wgt.	Wgt.			Wgt.	Wgt.	Wgt.	Wgt.	Wgt.	Wgt.	Wgt.	Wgt.
105	107	110	113	116	119	123	15-17		108	111	114	118	122	126	130	134
110	112	114	117	120	123	126	17-19		113	115	118	121	124	128	132	136
113	115	117	120	123	126	129	20-24		119	121	124	127	131	135	139	142
118	119	120	122	125	128	132	25-29		124	126	128	131	134	138	142	146
110	121	123	125	128	132	136	30-34		127	129	131	134	137	141	145	149
122	124	126	130	132	136	140	35-39		129	131	133	136	140	144	148	152
126	128	130	133	136	139	143	40-44		132	134	136	139	142	146	150	154
129	131	133	136	139	142	146	45-49		134	136	138	141	144	148	152	156
131	133	135	138	141	144	148	50-54		135	137	139	142	145	149	153	157
5'6"	5'7"	5'8"	5'9"	5'10"	5'11"	6'			5'8"	5'9"	5'10"	5'11"	6'	6'1"	6'2"	6'3"
127	131	135	139	143	147	151	15-17		138	142	146	151	156	161	166	171
130	134	138	141	145	150	155	17-19		140	144	148	153	158	163	168	173
133	137	141	145	149	153	157	20-24		146	150	154	158	163	168	173	178
136	140	144	148	152	156	159	25-29		150	154	158	163	169	175	181	187
140	144	148	152	156	160	163	30-34		154	158	163	168	174	180	186	192
144	148	152	156	160	164	167	35-39		157	162	167	172	178	184	191	197
147	151	155	159	163	167	169	40-44		159	164	169	175	181	187	194	201
151	155	159	163	167	171	173	45-49		161	166	171	177	183	190	197	204
152	157	162	166	170	174	177	50-54		162	167	172	178	184	191	198	205

INFORMATION FOR PLANTING VEGETABLES

Vegetable	Seed or plants for 100 ft. of row	Distance between:		Planting before or after frost	Days to harvest time	Yield per 100 ft. of row
		Rows	Plants			
Asparagus	50 pl.	4 ft.	2 ft.	Before	2 yrs.	30-50 lbs.
Beans:						
Snap-bush	12 oz.	2 ft.	3 in.	After	40	2 bu.
Snap-pole	12 oz.	30 in.	2 ft.	After	60-100	3 bu.
Lima-bush	12 oz.	30 in.	10 in.	After	110	2 bu.
Lima-pole	12 oz.	3 ft.	3 ft.	After	110	2 bu.
Beets: early	1 oz.	15 in.	2 in.	Before	50	2 bu.
late	1 oz.	15 in.	2 in.	Before	60	2 bu.
Broccoli	50 pl.	2½ ft.	2 ft.	Before	70	30 bu.
Brussels sprouts	50 pl.	2½ ft.	2 ft.	Before	100	30 qts.
Cabbage	50 pl.	2½ ft.	2 ft.	Before	100	50 heads
Cantaloupe or Muskmelon	½ oz.	5 ft.	4 ft.	After	100	150 melons
Carrots	1 oz.	15 in.	2 in.	Before	70	2 bu.
Cauliflower	50 pl.	2½ ft.	2 ft.	Before	100	50 heads
Celery	200 pl.	2½ ft.	6 in.	Before	120	200 plants
Corn	¼ lb.	3 ft.	2 ft.	After	70	100 ears
Cucumber	½ oz.	5 ft.	4 ft.	After	70	200 fruit
Eggplant	50 pl.	3 ft.	2 ft.	After	100	150 fruit
Dandelion	½ oz.	15 in.	6 in.	Before	100	2 bu.
Endive	½ oz.	15 in.	6 in.	Before	70	200 heads
Kale	50 pl.	3 ft.	2 ft.	Before	70	60 bu.
Kohlrabi	100 pl.	2 ft.	1 ft.	Before	60	2 bu.
Leeks	1 oz.	15 in.	2 in.	Before	100	300 plants
Lettuce:						
Leaf	½ oz.	15 in.	10 in.	Before	70	100 heads
Head	½ oz.	15 in.	12 in.	Before	60	100 heads
Okra	1 oz.	2½ ft.	1½ ft.	After	90	500 pods
Mustard greens and collards	1 oz.	1 ft.	2 ft.	Before	70	100 plants
Onions: sets	1 qt.	1½ ft.	3 in.	Before	50	140 bunches
seed	1 oz.	1½ ft.	3 in.	Before	110	2 bu.
Parsley	½ oz.	15 in.	4 in.	Before	70	75 bunches
Parsnips	½ oz.	15 in.	4 in.	Before	140	2 bu.
Peas	1 pt.	18 in.	1 in.	Before	50	2 bu.
Peppers	50 pl.	2 ft.	2 ft.	After	120	5 bu.
Potatoes (white)	6 lbs.*	3 ft.	15 in.	Before	100	3 bu.

INFORMATION FOR PLANTING VEGETABLES

<i>Vegetable</i>	<i>Seed or plants for 100 ft. of row</i>	<i>Distance between:</i>		<i>Planting before or after frost</i>	<i>Days to harvest time</i>	<i>Yield per 100 ft. of row</i>
		<i>Rows</i>	<i>Plants</i>			
Pumpkins	1 oz.	5 ft.	4 ft.	After	75	40 to 100
Radishes	½ oz.	15 in.	1 in.	Before	50	100 bunches
Rhubarb	25 rts.	4 ft.	4 ft.	Before	1 year	250 stalks
Rutabagas	½ oz.	15 in.	4 in.	Before	50	2 bu.
Salsify	½ oz.	15 in.	2 in.	Before	140	500 roots
Spinach	½ oz.	15 in.	3 in.	Before	65	3 bu.
Squash	1 oz.	4 ft.	4 ft.	After	60 to 120	75 to 150
Sweet potatoes	80 pl.	2½ ft.	15 in.	After	140	3 bu.
Tomatoes	25 pl.	4 ft.	4 ft.	After	120	4 bu.
Turnips	½ oz.	15 in.	2 in.	Before	50	2 bu.
Watermelon	1 oz.	6 ft.	6 ft.	After	110	40 melons.

*6 lbs. of small potatoes the size of small chicken eggs, or large potatoes cut into 3 or more sections.

TABLE OF FROST DATES

<i>State</i>	<i>Agricultural Experiment Station</i>	<i>Average date of last frost</i>	<i>Average date of first frost</i>	<i>Days of growing season</i>
Alabama	Gadsden	March 31	Nov. 2	216
	Mobile	Feb. 7	Dec. 5	302
Arizona	Prescott	May 13	Oct. 7	147
	Tucson	March 16	Nov. 20	249
Arkansas	Fayetteville	April 3	Oct. 24	204
	Hope	March 25	Nov. 4	224
California	Chico	March 31	Nov. 20	234
	Santa Monica	Jan. 20	Dec. 26	339
Colorado	Denver	May 10	Oct. 5	148
	Grand Junction	April 20	Oct. 10	173
Connecticut	Hartford	April 20	Oct. 14	177
	New Haven	April 15	Oct. 23	191
Delaware	Newark	April 20	Oct. 17	180
	Dover	April 17	Oct. 23	189
Florida	Jacksonville	Feb. 20	Dec. 1	284
	Tampa	Jan. 15	Dec. 20	339

TABLE OF FROST DATES

<i>State</i>	<i>Agricultural Experiment Station</i>	<i>Average date of last frost</i>	<i>Average date of first frost</i>	<i>Days of grow- ing season</i>
Georgia	Cornelia	April 15	Oct. 19	187
	Valdosta	March 14	Nov. 11	242
Idaho	Coeur D'Alene	May 12	Oct. 14	155
	Boise	April 28	Oct. 12	167
Illinois	Rockford	May 7	Oct. 11	157
	Anna	April 5	Nov. 1	210
Indiana	South Bend	May 6	Oct. 11	158
	Evansville	April 4	Oct. 27	206
Iowa	Osage	May 10	Sept. 25	138
	Osceola	April 25	Oct. 10	168
Kansas	Leavenworth	April 1	Oct. 18	200
	Winfield	April 15	Oct. 22	190
Kentucky	Louisville	April 11	Oct. 22	194
	Paducah	April 7	Oct. 24	200
Louisiana	Shreveport	March 6	Nov. 12	251
	New Orleans	Feb. 18	Dec. 5	290
Maine	Presque Isle	May 31	Sept. 18	110
	Portland	May 5	Oct. 11	159
Maryland	Towson	April 15	Oct. 22	190
	Salisbury	April 20	Oct. 20	183
Massachusetts	Amherst	May 12	Sept. 19	130
	Fall River	April 22	Oct. 23	184
Michigan	Traverse City	May 10	Oct. 9	152
	Detroit	April 29	Oct. 13	167
Minnesota	Two Harbors	May 19	Sept. 27	131
	Worthington	May 10	Sept. 30	143
Mississippi	Tupelo	March 31	Oct. 28	211
	Biloxi	Feb. 22	Nov. 28	279
Missouri	St. Joseph	April 11	Oct. 14	186
	Springfield	April 13	Oct. 20	190
Montana	Moccasin	May 21	Sept. 20	122
	Bozeman	June 1	Sept. 11	102
Nebraska	Alliance	May 12	Sept. 25	136
	Omaha	April 14	Oct. 16	185
Nevada	Lovelock	May 13	Sept. 23	133
	Las Vegas	April 1	Nov. 6	219
New Hampshire	Errol	June 1	Sept. 5	96
	Concord	May 11	Oct. 1	143
New Jersey	Charlottesville	May 12	Sept. 26	137
	Vineland	April 21	Oct. 20	182
New Mexico	Santa Fe	April 23	Oct. 19	179
	State College	April 9	Oct. 26	200

TABLE OF FROST DATES

<i>State</i>	<i>Agricultural Experiment Station</i>	<i>Average date of last frost</i>	<i>Average date of first frost</i>	<i>Days of grow- ing season</i>
New York	Buffalo	April 28	Oct. 22	177
	Cutchogue	April 20	Oct. 29	192
North Carolina	Winston-Salem	April 14	Oct. 24	193
	Wilmington	March 22	Nov. 14	237
North Dakota	Langdon	June 1	Sept. 12	103
	Fargo	May 20	Sept. 27	130
Ohio	Cleveland	April 16	Nov. 4	202
	Cincinnati	April 9	Oct. 23	197
Oklahoma	Woodward	April 7	Oct. 30	206
	Oklahoma City	March 29	Nov. 4	220
Oregon	Milton	April 17	Oct. 24	190
	Medford	May 7	Oct. 14	160
Pennsylvania	Eric	May 1	Oct. 11	163
	Philadelphia	April 21	Nov. 1	194
Rhode Island	Providence	April 16	Oct. 19	186
	Kingston	May 1	Oct. 14	166
South Carolina	Greenville	March 30	Nov. 6	221
	Charleston	Feb. 20	Dec. 11	294
South Dakota	Aberdeen	May 15	Sept. 23	131
	Yankton	May 2	Oct. 7	158
Tennessee	Cedar Hill	April 9	Oct. 25	199
	Knoxville	April 2	Oct. 29	210
Texas	Lubbock	April 9	Nov. 2	207
	Eagle Pass	Feb. 27	Nov. 26	272
Utah	Salt Lake City	April 20	Oct. 19	182
	St. George	April 19	Oct. 14	178
Vermont	Burlington	April 29	Oct. 8	162
	Bennington	May 15	Oct. 4	142
Virginia	Lynchburg	April 9	Oct. 27	201
	Norfolk	March 25	Nov. 16	236
Washington	Seattle	March 15	Nov. 20	250
	Walla Walla	April 10	Nov. 1	205
West Virginia	Terra Alta	June 8	Sept. 26	110
	Point Pleasant	May 23	Oct. 16	146
Wisconsin	Grantsburg	May 22	Sept. 19	120
	Milwaukee	April 26	Oct. 18	175
Wyoming	Powell	May 18	Sept. 20	125
	Torrington	May 20	Sept. 24	127

ANNIVERSARIES

Birthstones

Each of the months of the year has a stone or jewel associated with it and these stones are supposed to endow persons born in the month with lucky qualities. Until recently there was much confusion about the stones, but the National Association of Retail Jewelers compiled the following list, which is now standard:

JANUARY. Garnet.

FEBRUARY. Amethyst.

MARCH. Bloodstone.

APRIL. Diamond.

MAY. Emerald.

JUNE. Pearl.

JULY. Ruby.

AUGUST. Sardonyx.

SEPTEMBER. Sapphire.

OCTOBER. Opal.

NOVEMBER. Topaz.

DECEMBER. Turquoise.

Wedding Anniversaries

Certain wedding anniversaries have certain gifts associated with them. They are:

FIRST. Paper or iron.

SECOND. Straw.

THIRD. Candy.

FOURTH. Leather.

FIFTH. Wooden.

SEVENTH. Floral.

TENTH. Tin.

TWELFTH. Linen.

FIFTEENTH. Crystal.

TWENTIETH. China.

TWENTY-FIFTH. Silver.

THIRTIETH. Pearl.

THIRTY-FIFTH. Coral.

FORTIETH. Emerald.

FORTY-FIFTH. Ruby.

FIFTIETH. Golden.

SIXTIETH, SEVENTIETH, and SEVENTY-FIFTH. Diamond.

REMOVING STAINS AND SPOTS

When the nature of the stain is not known, it should first be sponged with cold water if the fabric is not injured by water. Hot water should never be used on unknown stains until other methods have been tried, as it will set many stains and make their removal difficult. If the stain is not removed by cold or warm water, chemicals should be applied.

Blood. If the material is washable, soak or rub the stains in cold or lukewarm water until they turn light brown; then wash the material in hot water. For stains on wool or silk, sponge with cold or lukewarm water. Raw starch mixed to a paste with cold water may be used for stains on thick materials such as flannel and blankets, which cannot conveniently be soaked. Apply the paste thickly to the stain

and brush it away when it has become dry.

Candy. If the material is washable, ordinary laundering is sufficient; sponge with clear warm water in other cases. If chocolate or dye stains remain, follow instructions given under "Chocolate" or "Dyes."

Chewing Gum. If the material is washable, soften the gum stain with egg white and then wash.

Chocolate and Cocoa. If the material is washable; soap and hot water often is all that is necessary, but Javelle water may be used on cotton or linen to remove persistent stains. When the fabric cannot be laundered, a grease solvent such as gasoline will dissolve the fatty contents of the stain, and the remainder can be removed by hydrogen peroxide.

Coffee. Fresh stains and most old ones on washable materials can be removed by ordinary laundering with soap and water, but a slight trace sometimes persists in the case of heavy or old stains. Drying the material in the sun will often remove these, or a bleaching agent may be used. Cream in the coffee often necessitates the use of a grease solvent such as carbon tetrachloride after the spot has dried. If the stains are on silk or wool material, sponge with cold or lukewarm water.

Dyes and Running Colors. If the material is washable, rinse the stains in cold or warm water, or soak them for 10 to 12 hours if necessary, and then dry in the sun. Repeat the treatment if the stains are not removed the first time. Spots on wool and silk can sometimes be removed by soaking or washing in cold water. Hydrogen peroxide, made slightly alkaline with ammonia solution, is used particularly for stains on white silk or wool; soak stains in this solution until they disappear and then rinse.

Egg. Heat makes egg stains difficult to remove, therefore hot water should not be applied first. If the material is washable and cold water is not effective, use hot water and soap as in ordinary laundering. For other fabrics, allow the stained place to dry after it has been sponged with cold water; then apply a grease solvent such as benzol.

Fruits and Berries. Almost all fruit stains, when fresh, can be removed with boiling or even warm water. As the majority of dried stains are set by alkalis, the use of soap is not advisable. Citrus fruits such as grapefruit and lemon are sometimes removed by ordinary laundering, but bleaches may be necessary; potassium permanganate is particularly effective. Oxalic acid solution can be used on white fabrics. Sponging with a 10 per cent solution of acetic acid is often helpful when

stronger chemicals cannot be used on very delicate colored materials. Stains remaining on silk or wool after sponging with warm water can be removed with hydrogen peroxide, made slightly alkaline with ammonia.

Grass and Foliage. If the material is washable, use hot water and soap, rubbing the stain vigorously. Remaining traces may be bleached out with Javelle water or potassium permanganate if the fabric is cotton or linen. Ether or denatured alcohol is useful on fabrics that laundering might injure.

Grease and Oils. Grease spots can usually be removed from washable materials with warm water and soap, especially if the soap contains naphtha. Solvents such as carbon tetrachloride and gasoline are effective in removing common grease, cedar, and vegetable oil stains. In the removal of spots containing dirt, apply the solvent from the other side of the material so that the particles will be washed from the fibers onto a pad of cloth placed underneath. For light-colored unwashable fabrics, a paste made by mixing the solvent with French chalk or magnesia is often used; spread the paste over the spot and brush it off after it has dried.

Ice Cream. Launder washable materials with soap and water to remove stains in which no highly colored fruit or other substance is present. Spots on other fabrics may be sponged with cold or lukewarm water. If a grease stain from the ice cream remains, remove it by the methods suggested for grease spots.

Ink. To a moist stain caused by ordinary writing ink, apply corn meal, salt, or talcum powder to remove any ink not absorbed by the fibers and to keep it from spreading. Work the absorbent around with a blunt instrument and renew it when it becomes soiled. When the dry absorbent fails to take up more ink, make it into a

paste with water and apply again. If the fabric is washable, soap and water is satisfactory for some types of ink. The stains may be soaked in milk for a day or two if necessary—changing the milk as it becomes discolored. Potassium permanganate is satisfactory for stains on many delicate fabrics.

Iodine. If the material is washable, soap and water will often remove a fresh stain. Fabrics that water would injure may be sponged with denatured or wood alcohol, or a dilute solution of ammonia.

Iron Rust. Spread the stained place over a vessel of actively boiling water and squeeze lemon juice on the stain. After a few minutes, rinse the material and repeat the process; this method cannot injure delicate white cottons or linens.

Meat Juice or Gravy. Boiling water sets them and should not be used until the protein has been removed by cold water. If grease spots remain, they can be removed by methods for grease and oils.

Medicines. Because of the great variety of substances used in medicines, it is impossible to give methods for removing all such stains. A tarry or gummy medicine can be treated with the same agents used for tar spots; medicines in a sugar syrup can generally be washed out with water; those dissolved in alcohol can sometimes be removed by sponging with alcohol. Many medicines used in swabbing sore throats contain silver nitrate, which can be moistened with a few drops of tincture of iodine, sponged and then removed with several crystals of sodium thiosulphate dissolved in one half cup of water. Javelle water sometimes bleaches a stain that resists laundering, but should not be used on wool or silk.

Mildew. If the material is washable, very fresh mildew stains can be washed out with soap and water; slight stains may often be removed by moistening

with lemon juice and salt and drying in the sun. Potassium permanganate is effective when used on old and persistent stains, and a 10 per cent solution of oxalic acid removes some forms of mildew.

Milk and Cream. If the material is washable, rinsing in cold or lukewarm water followed by hot water and soap is usually sufficient. For fabrics which ordinary laundering would harm, first sponge with a solvent such as carbon tetrachloride or gasoline, allow the spot to dry and then sponge carefully with water.

Mud. Allow mud stains to dry and brush carefully before any other treatment is used; sometimes nothing else is needed. If the fabric is washable, use soap and water. Stains on other materials may be sponged with denatured or wood alcohol.

Mustard. For stains on washable fabrics, use soap and water; for other materials, warm glycerin or hydrosulphite may be applied.

Paints. First scrape off as much of the stain as possible; if it has hardened, apply a solvent such as gasoline to both sides and allow time for the spot to soften. Excessive rubbing roughens the fabric. If the material is washable, fresh stains are removed by careful washing with plenty of soap and water; they may also be sponged or washed with pure turpentine. Carbon tetrachloride, chloroform, or benzol are effective for older stains when applied in the same way as turpentine. Stains from alcohol paints should be sponged freely with denatured or wood alcohol, or soaked for half an hour in strong ammonia and then washed. Water color paint spots are almost impossible to remove completely from unwashable fabrics, but they may be sponged with glycerin and later with lukewarm water to remove the glycerin.

Pencil Marks. A soft eraser can sometimes be used successfully in

effacing ordinary lead pencil marks, especially on stiff or starched materials. If stains from an indelible pencil have not been moistened, they can usually be removed by soaking in denatured or wood alcohol, ether, or acetone. Graphite marks may remain but can be removed by sponging with soap and water.

Perspiration. Colors changed by perspiration are difficult to restore, but treatment may be satisfactory in some cases. Though the perspiration of the body is usually acid, old stains may be alkaline due to decomposition; these may sometimes be removed with lemon juice or a 10 per cent solution of acetic acid. Yellow stains often produced on white material by perspiration may be removed (if the fabric is washable) by exposure to the sun after using soap and water. Hydrogen peroxide or potassium permanganate help to bleach such stains on unwashable white fabrics.

Scorch. Wool and silk usually cannot be restored to their original condition after being scorched, but wool may be improved by brushing with emery paper. Soap and water are sufficient to remove very light scorch stains from washable cotton or linen. Similar light stains can be removed from any white fabric by dampening a white cotton cloth with hydrogen peroxide and placing it over the stain; lay a clean dry cloth over this, and iron with a moderately warm iron—replacing the top cloth if the hydrogen peroxide soaks through.

Shoe Dressings. If the material is washable, fresh stains made by one of the black paste dressings can be removed by sponging or washing with soap and water. Turpentine may be used for pastes containing turpentine. Use potassium permanganate for stains from black liquid dressing, after first removing as much of the stain as possible by sponging or washing. Stains produced by tan polishing wax may be

removed from cotton and linen by laundering, from wool by sponging with alcohol, and from other fabrics by sponging with carbon tetrachloride or benzol. A spot caused by white shoe dressing should be sponged with water and dried, then brushed thoroughly with a piece of the same material.

Soot. First brush the stain, then place on it an absorbent powder such as cornstarch, corn meal, or salt; work the absorbent around until it becomes soiled. If the fabric is washable, sponge or wash the stain with soap and water. After being treated with an absorbent powder, unwashable materials should be immersed in a solvent such as gasoline and rubbed.

Tar, Road Oil, Creosote, Asphalt, Axle Grease. Carbon tetrachloride may be sponged on the stains, or they may be immersed in this liquid and rubbed. Follow by washing in soap and water if the fabric is washable.

Tea. If the stains are on cotton or linen and only a few days old, soak them in a borax solution (one half to 1 teaspoonful of borax to 1 cup of water) and then rinse in boiling water. Potassium permanganate may be applied to older stains, and to unwashable materials.

Tobacco. Treat stains from the tarry substances in the stem of a pipe in the same way as tar. To remove tobacco juice spots, wash with soap and water, sponging those materials that cannot be washed. If a stain on washable fabrics cannot be completely removed by laundering, moisten it with lemon juice and bleach it in the sun. Traces of the stain remaining on wool fabrics after sponging with water can sometimes be removed by sponging with denatured or wood alcohol.

Urine. These stains are so variable in composition that it is impossible to give methods which will be successful in all cases. A warm solution of salt and water is sometimes effective, and often will not destroy the color of the

fabric. Hydrogen peroxide or a little sodium perborate may be added to the salt solution.

Varnish, Shellac. Benzol is a good solvent for the usual type of spar varnish, and wood alcohol will remove stains of shellac varnish.

Vaseline. Sponge fresh stains with turpentine. Old stains can generally be removed by soaking in turpentine, even when they have been washed and ironed.

Water Spots. Dampen the entire

material evenly and iron it while still damp. Another method is to dip the fabric in an organic solvent such as carbon tetrachloride, gasoline, or benzol. Rubbing the spotted area with the same material often helps.

White Sauces, Cream Soups. If the material is washable, laundering with soap and water is usually sufficient. Other fabrics may be sponged. If necessary, follow this treatment with a grease solvent such as naphtha, gasoline, or chloroform.

FIRST AID

ACCIDENT TREATMENT

Drowning, Gas, or Smoke Suffocation. The patient should be laid on his stomach, with one arm extended directly above his head, the other arm bent at the elbow. Turn his face outward so that it rests on his hand or forearm—leaving the nose and mouth free. Kneel, straddling the patient's thighs and placing the palms of your hands on the small of his back, with your fingers resting on his ribs, the little finger barely touching the lowest rib and the tips of the fingers out of sight. Without bending your elbows, swing forward so that the weight of your body is brought to bear upon the patient. The shoulder should be directly over the heel of the hand at the end of this forward swing; now immediately swing backward, to remove the pressure completely.

After two seconds swing forward again. Repeat this process from 12 to 15 times a minute without interruption until the patient begins to breathe without help. As soon as this artificial respiration has been started and while it is being continued, an assistant should loosen any tight clothing about

the patient's neck, chest, or waist. Keep the patient warm and do not try to pour any liquids down his throat until he is fully conscious. When he revives, he should be kept lying down and not permitted to sit up or stand; if the doctor has not arrived by the time the patient has recovered consciousness, a stimulant should be given. One teaspoonful of aromatic spirits of ammonia in a small glass of water, or a hot drink of coffee or tea will serve the purpose.

Artificial respiration should be carried on at the nearest possible point to where the patient received his injuries. He should not be moved from this spot until he is breathing normally of his own volition, and then moved only in a lying position. If it becomes necessary to move the patient before his breathing is restored, artificial respiration should be continued during the time that he is being moved. A brief return of breathing does not always mean that the artificial respiration process can be stopped; sometimes the patient, after a temporary recovery, again stops breathing.

Shock. This condition is present in all serious injuries, and is greatly increased by bleeding and pain. The patient is pale, his skin cold and clammy, his pulse rapid but weak, and his breathing shallow. He should be laid on his back with the head low and the feet elevated 18 inches. Tight clothing about his neck, chest, and abdomen must be loosened at once; keep him warm with blankets and hot water bottles. If the patient can swallow, give him a hot liquid such as strong coffee, milk, or water, or a half teaspoonful of aromatic spirits of ammonia in water. Liquid should never be poured down the throat of an unconscious person.

Electric Shock. It is dangerous to move a victim of electric shock from the electric contact. Telephone the power company to shut off the current, or get an experienced electrician to make the rescue. Do not touch the wire or the body or clothing of the victim; absolutely dry boards may be used to push the wire away, but this should only be done with great caution. After the current has been stopped or the victim removed by an electrician, artificial respiration should be carried on as in the case of drowning.

Hemorrhage. Bleeding from arteries comes in spurts, and is brighter in color than blood from veins. Pressure with the fingers will usually control a hemorrhage from an artery. The points for pressure are as follows: just in front of the ear for bleeding from the temple; the inner side of the arm—about halfway from shoulder to elbow—for bleeding from the hand or arm; in the groin against the pelvis bone for bleeding from the foot, thigh, or leg; on the neck, the fingers forward just touching the windpipe—the thumb around the back of the neck for a cut throat; behind the collarbone at the side of the neck, pressing downward on the first rib, for bleed-

ing in the shoulder or arm pit. If necessary a tourniquet can be made by tying a handkerchief or bandage a hand's breadth below the arm pit or groin, and twisting until the flow of blood ceases. Loosen the tourniquet every 15 minutes. Allow it to remain loose if the bleeding has stopped, but retighten it immediately if the bleeding begins again.

Hemorrhage from a vein comes in a steady flow. It can be controlled by applying a clean compress or dressing over the wound, bandaging snugly, and then applying pressure directly over the dressing if necessary. The bleeding can be lessened by raising the wounded part above the rest of the body.

Open Wounds. In small cuts or scratches, bleeding is beneficial as it serves to wash out bacteria. Large cuts are apt to bleed freely, but unless an artery or vein has been opened, the hemorrhage will in most instances cease of itself; after the bleeding has stopped, paint the wound and the surrounding skin for a considerable distance with a light coat of tincture of iodine. Dirty or greasy wounds should first be cleansed with high-grade benzine. Apply a dressing of sterile gauze or freshly laundered muslin, and hold in place with a bandage. A sterile gauze bandage makes a convenient dressing for minor injuries around the fingers or hand. Never wash or touch a wound with your fingers, and do not touch that part of the gauze which comes in contact with the wound.

Shotgun, Rifle, or Pistol Wounds. A doctor should be summoned at once, and the wound covered with sterile gauze. Remember that there may be two wounds—one where the bullet went in, the other where it came out; if only one opening is seen, search for the other on the opposite side of the limb or body. Anti-tetanus serum should be administered by the doctor as soon as possible.

Wounds Caused by Fishhooks. Do not try to remove the barbed end of a fishhook by pulling it directly out of the flesh. Depress the shank of the hook, push the point forward and onward in an upward direction, and bring it out on the surface at another point. The barbed end should then be cut off with a wire cutter or file, and the hook can then be extracted by pulling on the shank without damage to the tissues.

Burns. All burns may be treated with tannic acid burn jelly, or fresh tannic acid in a 5 per cent solution; picric acid gauze moistened with clean water can also be used, and a paste or solution of baking soda on clean gauze is effective. When the skin is not broken, slight burns can be treated with a good burn ointment—preferably one that contains tannic acid. Most severe burns call for shock treatment.

Broken Bones. Handle the patient with great care to prevent the sharp ends of the bones from cutting through the flesh. Apply narrow boards, umbrellas, canes, or any other rigid articles as splints for the broken limbs to permit the patient to be moved without danger. Splints must be padded when applied next to the skin, and should extend beyond the joints above and below the fracture. The limb should be kept absolutely straight while the splints are fastened in place, and a doctor is of course always summoned in such cases.

Transporting an Injured Person. Three individuals are necessary to place an injured person properly on a stretcher—one to lift the head and shoulders, another the hips, and a third the legs. After the stretcher has been placed alongside the person, the three helpers should each kneel on one knee on the side of the patient away from the stretcher, so that they can lift him in unison first to their bended knees and then to the stretcher.

Eye Injuries. Particles may be re-

moved from the eye with a clean handkerchief, or a bit of clean cotton rolled on a toothpick or match stick. If a particle is imbedded in the eyeball or eyelid, making these methods unsuccessful, the patient should go to a doctor. The eye must not be rubbed. In case of serious eye injury, the patient should cover the injured eye with a clean cloth compress wrung out in ice cold water, and go at once to a hospital.

Sunstroke. Perspiration stops, followed by a sudden rise in the patient's temperature; the skin is dry, flushed, and very hot, while the pulse is rapid and strong. A person suffering from sunstroke is often unconscious. He should be cooled as quickly as possible with a cold bath or spray; apply ice bags or cold applications to his head, which must be elevated. Give no stimulants to the patient.

Heat Exhaustion. The same treatment as in the case of shock should be given.

Fainting. Place the patient on his back with his head low, raising his feet if convenient, and loosening any tight clothing. See that he receives plenty of fresh air. Smelling salts, ammonia on a handkerchief, or a little cold water on the face are often helpful, but do not try to make the patient drink anything while he is unconscious. One half teaspoonful of ammonia—well diluted in water—or hot black coffee may be given after consciousness returns.

Lightning. The treatment is the same as for electric shock.

Stings of Insects. Stings can often be prevented by anointing the skin with a preparation of 3 per cent marjoram oil, 5 per cent eucalyptus oil, 130 per cent alcohol, and 10 per cent thymol. Menthol in alcohol (1 part in 10) is an effective lotion for stings, and 15 grains of carbolic acid combined with 4 ounces of rose water and 2 drams of glycerine also serve to

lessen the irritation. When the sting of a bee, wasp, or yellow jacket remains in the flesh, it should be pulled out at once, and a drop or two of diluted ammonia applied to the wound. Harvest mites or "chiggers," occurring in shrubbery, grass, and especially in damp places, burrow under the skin and die—causing small red spots to appear. Sulphur is a good preventive and remedy for these mites; moderately strong ammonia, applied when the spots are first seen, is also an effective cure. A dilute tincture of iodine or collodion—applied lightly to the irritated parts—is the best remedy in case of severe suffering.

Spirits of camphor or oil of pennyroyal, rubbed on the face and hands or sprinkled on the pillow at night, will help to keep away mosquitoes. Oil of citronella and oil of tar are also used in regions where these insects are numerous. The stings may be relieved by a lotion of one level tablespoonful of boric acid powder and 20 drops of pure carbolic acid in a half pint of hot water; stir well, and shake until the boric acid is dissolved. The lotion should be cooled before it is applied.

Snake Bite. Not all snake bites are poisonous. The most common poisonous snakes in the United States are the cobra, the rattlesnake, the moccasin, and the copperhead. The symptoms of snake poisoning are: swelling and paralysis of the bitten part, mental depression, palpitation, difficulty in breathing. If you are doubtful as to whether a snake bite is poisonous, it is wise to follow the treatment described below.

A band made of a handkerchief, necktie, or similar article should be tied around the limb a few inches above the wound and twisted to shut off the circulation to the injured part. A cross-cut through the skin is made over each fang mark; the wound should then be sucked continuously for at least half an hour. If no doctor is

available, it will be necessary to cauterize the wound by heating a metallic object (such as a knife blade) in a fire and freely burning the injury. A compress soaked in a solution of boric acid should be applied after the cauterization. When this has been done, the tourniquet or band may be loosened for one minute and tightened again; if no alarming symptoms develop after 20 minutes, it may be loosened for two minutes before being re-tightened. This procedure is continued for several hours—gradually increasing the time during which the tourniquet is loose—so that only small quantities of the poison can get into the system at one time.

If the patient shows signs of great weakness, he should be given a stimulant such as one half teaspoonful of aromatic spirits of ammonia in water every hour, and half a cupful of strong coffee every two hours. Keep him lying down and loosen any tight clothing that he may be wearing, as in the treatment for shock.

Frost Bite. Rubbing with snow is never advisable; the frozen tissues are bruised and torn, and gangrene is apt to result. Gently cover the affected part with the hand or some other portion of the body until thawing is complete, and normal circulation is re-established. A hand that is frost-bitten should be held next to the skin in the arm pit or between the thighs. The frozen part may be thawed very gradually in cold water or cool air, or covered with extra clothing.

Dog Bites. These are usually minor lacerated wounds, but are especially dreaded because of the danger of hydrophobia. If a person is bitten by a healthy dog, the wound should be thoroughly swabbed with tincture of iodine and bandaged. When the dog is suspected of having hydrophobia, the wound must be cauterized by a doctor. After the cauterization the patient should receive the Pasteur treatment

—which consists of a series of injections covering a period of some weeks.

Bites of Cats and Other Small Animals. Apply tincture of iodine thoroughly worked into the wound with a swab of cotton on a clean toothpick or similar object. A sterile bandage should then be applied.

Bites of Scorpions, Centipedes, or Spiders. The bites of scorpions and centipedes may cause considerable general weakness, headache, sweating and vomiting, but are rarely fatal. A wound of this type should be encouraged to bleed as much as possible, and afterward cauterized (preferably by a doctor) with carbolic acid or some similar caustic; tincture of iodine may be applied. An ice compress should be placed over the injury to limit local reaction. The general symptoms, such as prostration and headache, should be treated by moderate stimulants such as 30 drops of aromatic spirits of ammonia in water every hour. This may be supplemented with half a cupful of very strong black coffee if necessary.

Some authorities recommend the application of a constricting band (as in the case of snake bite) which is gradually loosened in order to prevent the poison from being too quickly absorbed by the system.

In most spiders the mandibles are so small and weak as to be incapable of piercing the human skin, and if they did so, the small amount of poison injected could have no severe effect. But a person who is bitten by the venomous black widow spider or a tarantula should receive the same treatment given for snake bite.

Impure Water. The greatest danger in drinking water of unknown purity is from diseases, of the typhoid fever and cholera group, that are caused by organisms. A rapid and easy method of purifying water is as follows: add one or two drops of tincture of iodine to a quart of water in a bottle or similar container, which should then be shaken for about one minute; after 20 or 30 minutes all the harmful bacteria in the water will be dead.

POISONS AND THEIR ANTIDOTES

In the treatment of any poison case in which the patient is conscious, it is necessary to dilute the poison that has been swallowed, and to cause immediate vomiting. These purposes can both be accomplished by having him drink an emetic such as a large quantity of soap suds, soda in water, or salt water. The services of a doctor should be secured at once.

Ammonia. Symptoms—Severe burning pain in the mouth, throat, and stomach, followed by vomiting and purging.

Treatment—After an emetic has been given and the stomach washed out, soothing liquids and stimulants may be taken if needed.

Arsenic. Found in rat poison, vermin killer, and Paris green.

Symptoms—Severe pain in the stomach, cramps in the legs, purging and vomiting, cold perspiration, and great shock.

Treatment—When the stomach has been emptied, the patient may be given castor oil and a stimulant such as hot coffee, or 1½ teaspoonfuls of aromatic spirits of ammonia well diluted with water. He must be kept warm.

Carbon Monoxide. The principal danger is from exhaust gas produced by automobiles or leaking gas pipes, although carbon monoxide also comes from leaking furnaces and stoves, gas stoves without flue connections, and burning buildings.

Symptoms—Vary considerably, depending on the concentration of the

carbon monoxide breathed. The result is usually a red coloration, especially of the ears, lips, and nails, and a stopping of breathing.

Treatment—Remove the patient at once from the atmosphere containing carbon monoxide. If his breathing has stopped, begin artificial respiration by the prone pressure method as in the case of a drowned person; administer oxygen as quickly as possible and in as pure a form as is obtainable, preferably from an inhalator. The patient must be kept warm, and should rest quietly after he recovers.

Corrosive Acids. These include carbolic, acetic, nitric, sulphuric, hydrochloric, and weaker acids such as oxalic.

Symptoms—Very severe burning in the mouth, throat, and stomach; the stronger acids destroy the skin. Vomiting or purging often results, and suffocation may occur from swelling of the throat.

Treatment—Large quantities of soap suds make the best emetic in these cases, and burns of the mouth and throat may be treated with alcohol to stop further burning. After vomiting has been induced, the patient may drink soothing liquids such as milk or olive oil. Aromatic spirits of ammonia ($1\frac{1}{2}$ teaspoonfuls well diluted with water) is a suitable stimulant.

Food Poisoning. Formerly called ptomaine, this form of poisoning is caused by contaminated food that has become infected with harmful organisms. Fish, chicken, hash, or potatoes may be especially dangerous.

Symptoms—Nausea, vomiting, and purging, with severe pain in the abdomen; cramps and great weakness also result. Eruptions often appear on the skin, which is cold and clammy.

Treatment—After the emetic, a purgative of Epsom salts or castor oil should be given; if the patient is very weak, he may drink a stimulant such as hot coffee or a half teaspoonful of

aromatic spirits of ammonia well diluted with water.

Iodine. Because of its wide use in the treatment of scratches, cuts, and wounds, iodine is found in almost every household, and as a consequence this antiseptic is sometimes swallowed accidentally.

Treatment—After vomiting has been induced, the patient should be given starch or flour mixed with water to about the thickness of buttermilk.

Lead. Lead paint, white lead, or sugar of lead.

Symptoms—Dryness of the throat, a metallic taste with great thirst, pain in the abdomen, cold perspiration and cramps in the legs; sometimes paralysis of the legs and convulsions.

Treatment—After thoroughly emptying the stomach with an emetic, the patient may be given a half ounce of Epsom salts in water, and stimulants or soothing liquids if necessary.

Narcotics. Opium, laudanum, morphine, codeine, heroin, paregoric, some soothing syrups, and cough mixtures.

Symptoms—Drowsiness and finally unconsciousness; the pulse is full at first, then weak as the breathing becomes gradually slower and more shallow. The pupil of each eye is the size of a pinpoint, while the face becomes flushed and then purple.

Treatment—There may be difficulty in getting the emetic to produce vomiting. If the patient is conscious, he should be given a large amount of strong coffee; try to arouse him by speaking loudly or threatening, but do not tire the person by forcing him to walk. If his breathing stops, it will be necessary to give artificial respiration as in the case of suffocation by drowning, gas, or smoke.

Phosphorus. In many rat poisons and vermin killers.

Symptoms—Severe pain in the stomach, vomiting, bleeding from the nose, purging, and convulsions.

Treatment—After an emetic has

been given, the patient should take a half ounce of Epsom salts in water or magnesia. Stimulants or soothing liquids are recommended, but avoid giving him oils or fats.

Poison Ivy and Poison Oak. The vine is of the trailing variety, with three pointed leaves on each stem. It is poisonous to the touch.

Symptoms—A few hours or a day after the skin is exposed to the poison of the plant, a red rash appears—with more or less swelling and itching. Small blisters, filled with serum, form and are likely to burst; later the condition may result in a formation of pus. If the inflammation is very severe, there may be some incidental disturbance such as fever, headache, and a general feeling of sickness.

Treatment—A thorough washing with soap and water, immediately after exposure to poison ivy or poison oak, is often helpful in preventing the usual inflammation. Some of the lather should be allowed to dry on the skin. If this treatment does not prevent the inflammation, bathing with salt water (preferably sea water) is recommended. Another good lotion is made by dissolving one teaspoonful of boric acid in a glass of hot water, applying the liquid after it has cooled. Bicarbonate of soda made into a very thin paste with water is also of service. Every one or two days the affected

parts should be bathed with warm water, carefully dried without rubbing, and the treatment resumed.

Poisonous Mushrooms or Toadstools. **Symptoms**—Vomiting and purging, watery diarrhea, the pulse slow and strong at first but later growing very weak.

Treatment—The same as for food poisoning.

Potash. **Symptoms**—Much like corrosive acids, with immediate severe burning in the mouth, throat, and stomach, followed by vomiting and purging.

Treatment—The same as for corrosive acids.

Strychnine or Nux Vomica. Pills containing this poison are often taken accidentally by children; strychnine is also used in some vermin killers.

Symptoms—Twitching of the hands and feet, followed by convulsions. The jaws are locked, and spasms of the muscles become so great that breathing may be prevented.

Treatment—After vomiting has been induced, powdered charcoal may be given and the emetic repeated.

Veronal or Luminal. **Symptoms**—The patient becomes very drowsy and falls asleep. In severe cases, the sleep is so profound that he cannot be aroused.

Treatment—The same as for narcotics.

BUSINESS TERMS AND THEIR MEANINGS

(See also "How Banks Operate" and "Stock Exchanges" on pages 271-274.)

A-1. The highest rating.

Acceptance. An agreement to pay a note; also a draft signed by the payer to show agreement accepting the conditions of payment.

Account. A statement showing the amounts debited or credited to a person or firm.

Adjudicate. To decide in court.

Administer. To manage, especially an estate of a person who dies without making a will.

Affidavit. A written sworn statement signed before an officer who has authority to administer oaths.

Amortization. The gradual reduction of a debt or obligation by reserving periodically enough money to wipe out the full amount within a certain time.

Annuity. A payment every year, usually after retirement or after a specified time.

Arbitrage. Buying in one market and reselling immediately in another at a profit.

Assessment. A demand by a corporation or other organization on its shareholders or members for a certain payment.

Assets. Property, as opposed to liabilities.

Attachment. Taking over property or assets by court order.

Bear. A speculator who sells, for future delivery, securities or produce

that he does not own, in the expectation of buying them at a lower price before the date of delivery.

Beneficiary. One who is entitled to receive the benefits or income from an estate.

Bill of lading. A receipt for goods delivered on board a carrier stating the contents and the person to whom they are to be delivered.

Bond. A security issued by a corporation or government and bearing the obligation to pay interest at stated times and to repay the principal at a specified date.

Bourse. A foreign stock exchange.

Boycott. An agreement to refuse to have any dealings with certain persons or concerns.

Broker. A dealer in securities; one who brings together the parties of a transaction.

Budget. An estimate made in advance of receipts and expenditures for a certain length of time.

Bull. A speculator who buys in the expectation that the price will rise.

Capital. In accounting, the excess of assets over liabilities. Generally, that which is used for the further production of wealth.

Certified check. A check which has been certified by the bank on which it has been drawn to be worth its face value.

Clearing house. A central organiza-

tion of banks at which checks payable by each are exchanged for payment.
Closed shop. A shop that refuses to employ any but union workers.

Collateral. Securities or other valuable considerations pledged to guarantee the repayment of a loan.

Consignment. A shipment of commodities; sometimes understood to carry the privilege of return if not sold.

Copyright. The sole legal right to use an original or to sell copies thereof for a period of years.

Curb market. An association of stockbrokers who deal in securities not listed on the regular stock exchanges.

Customs. Duties or taxes on imported articles, charged by governments.

Credit. Time allowed for payment of goods purchased; the reputation of a concern for prompt payment; an entry on the right side of a ledger account.

Debit. An entry on the left side of a ledger account.

Depreciation. A lessening of value through use or age.

Discount. A reduction made for payment within a certain length of time; a reduction from a list price; a deduction made for interest in advance.

Dividends. Annual or other periodical payment of profit to stockholders.

Earmarked money. Money set aside for a specific purpose.

Embargo. A restriction placed by a government upon trade of certain kinds, or with certain countries.

Equity. The owner's actual interest in a property after prior claims have been met.

Fiduciary. A trustee.

Fiscal year. The financial year used by concerns in making up accounts.

Foreclosure. A legal proceeding which permits the sale of a piece of mortgaged property to be sold to satisfy the claim of the mortgage holder.

Franchise. A license, privilege, or monopoly granted by a governing authority to carry on a certain business.

Good will. The value of a firm's reputation.

Gross. The full amount, without deductions as in gross profit; also 144 units.

Hedging. Protecting oneself against loss by buying against a sale or selling against a purchase.

Injunction. An order issued by a court forbidding the continued commission of an act or of a threatened act.

Inventory. A detailed list or schedule of articles, usually with prices or values, on hand at a certain time.

Journal. A day book in which transactions are to be entered daily.

Ledger. An account book containing a summary of all the transactions of a firm.

Legal tender. Paper or metal money that a government decrees must be accepted as lawful payment for debts.

Letter of credit. A credit arranged by a letter from a bank to its representatives in a foreign country notifying them to pay a specified person certain sums of money, for which the bank will assume responsibility.

List price. The prices at which goods are listed in a catalogue.

Lloyd's. Originally an organization of English marine insurance men, now an organization that will underwrite virtually any type of risk.

Margin. Money or other assets left with a stockbroker by a speculator in stocks or bonds.

Mark-down, mark-up. The amount deducted from or added to the cost price to determine the sale price.

Mortgage. The pledging of property as security for the payment of a loan.

Net. An amount left after all deductions are made.

Option. The right to buy or make any other kind of choice within a specified length of time.

Par value. The value stated on the face of stocks or other securities.

Power of attorney. The right granted by one person to another to sign papers for him or to perform other specified acts.

Promissory note. A bill of exchange by which a debtor promises to pay a certain amount of money on a specified date.

Proxy. A written authority giving an individual the right to act for another at a meeting or in a transaction.

Receiver. A person appointed by the court to take charge of and manage a property in dispute or to preserve the property of a bankrupt or insolvent company.

Royalty. A fee paid to an inventor for the use of a patent by a manufacturer or to an author or composer by a publishing company as a share of the

profit on each copy of a book or piece of music sold.

Selling short. Speculation by selling stocks or commodities that the seller does not own, but which he borrows in order to make delivery and endeavors to buy at a lower price than that at which he sold.

Subpoena. A legal writ commanding an individual to appear in court.

Testator. A deceased person who has left a will.

Tort. A wrong done against an individual or concern that entitles him to take action in the civil courts.

Trade mark. A distinctive design, mark, or name placed on articles by manufacturers or merchants to distinguish their goods.

Trust company. A bank organization which acts as trustee under wills or deeds of trust.

Usury. Higher interest rates than the laws of a state allow.

Voucher. A receipt for a payment of money; a paid check; any document that proves a transaction.

HOW BANKS OPERATE

Banks are fundamentally concerned with borrowing and lending money. When you deposit money in a bank—whether in a checking or a savings account—you are making a loan to the bank. Part of this money is then loaned by the bank to others, at a rate of interest higher than that which is paid to you. In this way the bank is able to keep enough surplus money on hand so that you may withdraw part or all of your deposit whenever you wish, and also make a profit for its stockholders. When borrowing from a bank, you must provide adequate security that may be sold in case the money is not repaid.

Checking Accounts. Unlike the savings account, the checking account draws no interest. Before opening a checking account at a bank, you should first know the minimum balance that is required, and the amount of service charge that you will have to pay if the balance falls below this minimum. The bank will probably ask for references, since it wants to be certain that all its depositors are responsible people who will not bring the name of the bank into disrepute by issuing bad checks. After qualifying, you will be given a blank check book as well as a passbook. A check is a written order to the bank where you have

money deposited to pay a certain stated sum on demand to a person or company. This sum is always indicated both in figures and in writing. Attached to the check is a stub on which a complete record of the check's details should be kept, and also of the amount of money left when the sum written on the check is deducted from the sum which you have deposited in the bank.

All checks should be filled out entirely in ink. It is wise to begin writing the amount for which the check is drawn (both the figures and the words) as near the left-hand side as possible. You should then fill in any blank space that happens to be left—after the amount has been written in—with a line to prevent anyone from altering the amount. When a mechanical check writer is used, there is comparatively little danger of the check being raised, since these devices use indelible ink and make a semi-perforation of the paper. A check on which an error has been made should be destroyed. You should write your check signature naturally, since one that is easily read is always difficult to forge. Making checks payable to "Cash" or "Bearer" is an unwise policy; they are frequently cashed by persons for whom they are not intended.

A check must be endorsed by the person or firm to whom it is payable before it can be either deposited or cashed. To endorse a check, write your name on the reverse side near the top on the end nearest the beginning of the words "Pay to the order of." The endorsement should be written exactly as the name to which the check is made out, even to an error in the spelling of the name; for example, if your regular signature is R. A. Johnson, and the check is drawn to the order of Robert A. Johnson, endorse the check in the following manner:

Robert A. Johnson
R. A. Johnson

When you endorse a check for deposit to your account, it is best to use this method:

For deposit
R. A. Johnson

If you wish to make the check payable to another person instead of depositing it to your account, endorse it thus:

Pay to the order of
Henry W. Smith
R. A. Johnson

Before Henry W. Smith can cash this check or deposit it to his account, he must sign his own name under that of R. A. Johnson.

When you are given a check on a bank where you are not known, and you wish to cash it instead of depositing it in your own bank, needless delays may be avoided if you ask the person who has drawn the check to write "Signature O.K." or "Endorsement guaranteed" beneath your signature. Signed by the drawer, this guarantee will enable you to obtain the cash.

Certified checks are regarded as cash, and are often required for payment of various kinds of taxes and in transactions involving the sale of securities. In order to draw a check of this type, you must fill out your check in the usual manner and present it to the bank teller, who will stamp or mark it "Certified," adding his initials as well as the date. The check is thus guaranteed by the bank to be worth the amount for which it is made out.

Cashier's checks are used by people who have no account with the bank, but wish to use a check for the transfer of funds—such as the payment of a debt. To obtain this kind of check, you must give the bank teller the necessary amount of money, and he will then draw up a cashier's check for you to use.

A check is never good before the date indicated on its face. A post-dated check is one dated ahead of the

day on which it is drawn; the receiver of such a check should know about the post-dating and agree to accept it—otherwise an intent to defraud might be proved.

If you fill out a check and lose it before it is given or sent to its proper destination, you may ask the bank to stop payment on the check. The person to whom the check is made payable should be notified of this procedure.

There are severe penalties for issuing or negotiating checks when there are no funds—or insufficient funds—in the bank on which they are drawn, but in some instances an honest mistake in bookkeeping will result in the dishonoring of a check. When a check is dishonored, the drawer generally is granted a certain number of days in which to make it good before the intent to defraud is assumed. A check is not good if the maker dies before it is deposited; when this occurs, the creditor must file a claim against the estate of the deceased to get his money.

Bank Statements. At regular stated periods, varying from every month to every three months, the bank sends you a careful record of your transactions with it during the preceding period. This statement should be compared with the stubs in your checkbook, to make sure that your balance and theirs are in agreement and that all the items are correctly entered. The canceled checks (vouchers) are returned with the statement if they have been paid by the bank. If your balance indicated on the statement is greater than that in your checkbook, it is likely that one or more vouchers have not been returned. By arranging those you have in numerical order, you can discover which ones are missing.

Joint Accounts. Two or more persons can open a joint bank account, which is payable to either or all. The signatures of those who are parties to such accounts must be registered at the bank. Sometimes access to an ac-

count is given permanently or temporarily, through a power of attorney, to a trusted relative, friend, or lawyer who may be relied upon to handle the funds through a checking account.

Savings Accounts. A savings account can generally be opened with as little as one dollar, but interest is not often paid on sums of less than five dollars. The rate of interest varies with different banks; it is seldom less than two per cent or more than four per cent. All deposits and withdrawals are entered in the passbook, and after each withdrawal the balance is indicated. At stated intervals the accrued interest is added to the balance. The passbook must be presented each time money is either deposited or withdrawn; when a deposit is made by mail, the passbook must be enclosed with the money in a registered envelope.

The Clearing House. Clearing houses are places of exchange where banks send their checks in order to avoid actually interchanging money. In clearing houses, the amounts owed by the banks and the amounts due the banks are set against each other and the accounts are balanced. Whether one is larger than the other determines whether the bank is a creditor or debtor.

Trade Acceptances. Among the kinds of negotiable paper handled by banks is the trade acceptance—a time draft or bill of exchange that is drawn by the seller on the buyer, and is to be paid on a certain future date and at a specified place. The amount of money to be paid as well as the promise to pay are both agreed to by the buyer when he writes "Accepted" across the face of the paper, filling in the date of acceptance, naming the bank at which the money will be paid, and finally writing his signature. The trade acceptance is then returned to the seller, who may either hold it until the specified date (maturity) or discount it at the bank.

Other Functions of Banks. All banks provide storage facilities for money, securities, important papers such as bonds or stock certificates, jewelry, and other valuables. These are guarded in safe deposit vaults, which are available in a number of different sizes; the rental charge for this service is low.

Banks perform many personal services for depositors, such as issuing let-

ters of credit for travelers, acting as trustees for individuals and estates, and as guardians when so designated in wills. Usually a bank is able to advise clients with regard to the investment of money or any financial transaction. Travelers' checks, which may be obtained at all banks by paying the required amount of money, are regarded as the equivalent of actual cash.

STOCK EXCHANGES

Stock exchanges are places where persons buy and sell securities. The New York Stock Exchange is by far the largest and best known. On the stock exchange are two kinds of dealers, the brokers and the traders. A broker acts as an agent for a person who wants to buy stock, and is paid a commission for his services. Two-dollar brokers are agents for other brokers, and are so called because their standard fee used to be two dollars. The rules of the exchange regulate the minimum amount that a broker may receive as his commission. A trader (who may also be a broker) acts on his own account, getting his profit from his own transactions.

Any order given to a broker is canceled at the close of the day on which it was entered, unless he has been told not to cancel it; orders may be given to a broker with instructions that they are to remain good until he is told otherwise. These are called G. T. C. (good till canceled) orders. He can be asked to buy or sell the stock either at a specified price or at the market price, but he is free to buy at a price that is lower than the one which has been specified. When selling stock, the broker cannot sell at a price lower than the one specified; however, he may sell at a higher price if he so desires.

To buy on margin means to buy on credit. The buyer gives his broker a

required percentage of the money needed to buy the stock; if the value of the stock declines, the buyer may have to advance more money. As a special precaution, he can give the broker a stop-loss order—naming a price (less than the market price) at which he wants the broker to sell in case the stock's value decreases.

The different prices of stocks are known by various terms, according to the nature of the transaction:

The bid price is the price offered by a person who wants to buy stock.

The asked price is the price asked by a person who wants to sell stock.

The actual price is the price at which the stock is finally sold.

The nominal price is an estimated price when no prices for a stock are offered or asked.

The market price is the price at which a stock is being sold at a specified time.

The firm price is one that is quoted and held to for a certain length of time, and is often used among brokers when a stock is inactive.

The exhaust price is the price at which a buyer who has bought stock on margin will have to advance more money to his broker in order to retain the stock.

Other Stock Exchange Terms

Time loans are made with the agreement that the borrower will re-

pay the money within a specific period of time, such as ninety days. The rate of interest usually remains unchanged; but if the value of the borrower's security declines greatly, the person who has loaned the money may demand additional security.

Call loans are not made for any definite length of time, but are renewed each day. The amount of interest on the loan may vary from day to day, and the day's activities on the stock exchange depend to a great extent on whether call loans will be large or small.

Ticker tape is a long strip of paper tape on which all stock exchange sales are recorded as soon as they are made. The ticker itself, which contains the tape, is a telegraphic instrument that automatically prints these reports in the form of symbols and figures.

Selling short means selling stock that one does not own; this practice is generally confined to professional stock market operators.

A stock certificate is received by the person who buys one or more shares of stock. The certificate is written proof that he is a stockholder in a corporation, and if this valuable paper is lost or mislaid, the owner should immediately notify the corporation as

well as the broker from whom he bought the stock.

A right is the privilege—granted to the original stockholders—of buying new shares in a corporation whenever it floats a new issue of stock. Rights can be bought or sold, and their value depends on the corporation by which they were issued.

Preferred stock gives its owner the privilege of receiving dividends from the corporation before the owners of common stock are allowed to receive them.

The Securities and Exchange Commission protects the investing public by requiring all corporations that issue stock to file with the Commission (and furnish to persons wishing to buy the stock) all the important facts about these securities. The Commission has the power to prevent any stock exchange speculation that it considers unreasonable, and to prevent any manipulation of stocks.

Bondholders, by purchasing bonds from a company, have loaned it a certain amount of money at interest. Stockholders are part owners in a company. As a general rule, the amount on the face of a bond is \$1,000, but \$100 bonds may also be bought from some corporations.

VALUE OF FOREIGN CURRENCIES

The values listed are as of April 1, 1945, and are quoted from a circular issued by the Director of the Mint, United States Treasury Department. Variations of these values are reported in the financial pages of newspapers and elsewhere.

ARGENTINE REPUBLIC	gold peso	\$1.6335
	paper peso	convertible at 44 per cent of face value. (Worth \$0.2488 on May 14, 1945.)
AUSTRALIA	pound	\$8.2397
BELGIUM	belga	\$0.1695
BOLIVIA	boliviano	\$0.6180
BRAZIL	cruziero	\$0.2025
BRITISH HONDURAS	dollar	\$1.6931
BULGARIA	lev	\$0.0122

CANADA	dollar	\$1.6931
CHILE	peso	\$0.2060
CHINA	yuan	nominally 20 yuans are equal to 1 U.S. dollar.
COLOMBIA	peso	\$0.5714
COSTA RICA	colon	\$0.7879
CUBA	peso	\$1.0000
CZECHOSLOVAKIA	koruna	unsettled. (Par value is \$0.0300.)
DENMARK	krone	\$0.4537
DOMINICAN REPUBLIC	dollar	\$1.6931
ECUADOR	suere	\$0.3386
EGYPT	pound	\$8.3692
ESTONIA	kroon	\$0.4537
FINLAND	markka	\$0.0426
FRANCE	franc	regulated by stabilization fund. (Franc valued at \$0.0202 on May 14, 1945.)
GERMANY	reichsmark	\$0.4033
GREAT BRITAIN	pound sterling	\$8.2397
GREECE	drahma	\$0.0220
GUATEMALA	quetzal	\$1.6931
HAITI	gourde	\$0.2000
HONDURAS	lempira	\$0.8466
HUNGARY	pengo	\$0.2961
INDIA (BRITISH)	rupee	\$0.6180
INDO-CHINA	piaster	nominally 1 piaster is equal to 10 French francs.
IRELAND	pound	\$8.2397
ITALY	lira	\$0.0526
LIBERIA	dollar	\$1.6931
LITHUANIA	litas	\$0.1693
MEXICO	peso	unsettled. (Mexican peso valued at \$0.2070 on May 14, 1945.)
NETHERLANDS	guilder (florin)	\$0.6806
NEWFOUNDLAND	dollar	\$1.6931
NEW ZEALAND	pound	\$8.2397
NICARAGUA	cordoba	\$1.6933
NORWAY	krone	\$0.4537
PANAMA	balboa	\$1.0000
PARAGUAY	guarani	\$0.3255 was exchange rate fixed by bank of Paraguay in 1943.
PERSIA (IRAN)	rial	\$0.0824
PERU	sol	\$0.4740
PHILIPPINE ISLANDS	peso	\$0.5000
POLAND	zloty	\$0.1899
PORTUGAL	escudo	\$0.0749
RUMANIA	leu	\$0.0101
SALVADOR	colon	\$0.8466

SPAIN	peseta	unsettled. (Par value is \$0.1930.)
STRAITS SETTLEMENTS	dollar	\$0.9613
SWEDEN	krona	\$0.4537
SWITZERLAND	franc	unsettled. (Valued at \$0.2338 on May 14, 1945.)
THAILAND (formerly SIAM)	baht (tical)	\$0.7491
TURKEY	piaster	\$0.0744
UNION OF SOUTH AFRICA	pound	\$8.2397
URUGUAY	peso	\$0.6583
VENEZUELA	bolivar	\$0.3267
YUGOSLAVIA	dinar	\$0.0298

WEIGHTS AND MEASURES

LINEAR MEASURE

12 inches (in.)	= 1 foot (ft.)
3 feet	= 1 yard (yd.)
6 feet	= 1 fathom
5½ yards = 16½ feet	= 1 rod (rd.)
40 rods	= 1 furlong
320 rods	= 1 mile (mi.)
1760 yards	= 1 mile
5280 feet	= 1 mile
8 furlongs	= 1 mile
6080.20 feet	= 1 nautical mile

METRIC LINEAR MEASURE

10 millimeters (mm.)	= 1 centimeter (cm.)
10 centimeters	= 1 decimeter (dm.)
10 decimeters	= 1 meter (m.)
10 meters	= 1 decameter (Dm.)
10 decameters	= 1 hectometer (Hm.)
10 hectometers	= 1 kilometer (Km.)
10 kilometers	= 1 myriameter (Mm.)

Approximate Equivalents

1 centimeter	= about 0.4 inch
1 meter	= about 1.1 yard
1 kilometer	= about 0.6 mile
1 inch	= about 2.5 centimeters
1 yard	= about 0.9 meter
1 mile	= about 1.6 kilometers

UNITS OF SURFACE MEASURE

144	square inches (sq. in.)	=	1 square foot (sq. ft.)
9	square feet	=	1 square yard (sq. yd.)
30¼	square yards	=	1 square rod (sq. rd.)
160	square rods	=	1 acre (A.)
640	acres	=	1 square mile (sq. mi.)

METRIC SURFACE MEASURE

1	square millimeter (sq. mm.)	=	.000001 square meter
1	square centimeter (sq. cm.)	=	.0001 square meter
1	square decimeter (sq. dm.)	=	.01 square meter
1	square kilometer (sq. Km.)	=	1,000,000 square meters

Approximate Equivalents

1 sq. inch	=	about 6.5 sq. centimeters
1 sq. foot	=	about .09 sq. meter
1 sq. yard	=	about .84 sq. meter
1 sq. mile	=	about 2.6 sq. kilometers
1 sq. centimeter	=	about .15 sq. inch
1 sq. kilometer	=	about .39 sq. mile

UNITS OF VOLUME

1728	cubic inches (cu. in.)	=	1 cubic foot (cu. ft.)
27	cubic feet	=	1 cubic yard (cu. yd.)
128	cubic feet	=	1 cord (cd.)

MEASURES OF CAPACITY

LIQUID MEASURE

4	gills (gi.)	=	1 pint (pt.)
2	pints	=	1 quart (qt.)
4	quarts	=	1 gallon (gal.)

DRY MEASURE

2	pints	=	1 quart (qt.)
8	quarts	=	1 peck (pk.)
4	pecks	=	1 bushel (bu.)

METRIC UNITS OF VOLUME AND CAPACITY

1	cubic millimeter (cu. mm.)	=	.000000001 cubic meter
1	cubic centimeter (cu. cm.)	=	.000001 cubic meter
1	cubic decimeter (cu. dm.)	=	.001 cubic meter
1	centiliter (cl.)	=	.01 liter
1	deciliter (dl.)	=	.1 liter
1	hektoliter (Hl.)	=	100 liters

AVOIRDUPOIS WEIGHT

16 ounces (oz.)	= 1 pound (lb.)
100 pounds	= 1 hundredweight (cwt.)
20 hundredweights	= 1 ton (T.)
2000 pounds	= 1 ton
2240 pounds	= 1 long ton
7000 grains (gr.)	= 1 pound avoirdupois

METRIC MEASURES OF WEIGHT

1 centigram (cg.)	= .01 gram
1 decigram (dg.)	= .1 gram
1 kilogram (Kg.)	= 1000 grams
1 quintal (Q.)	= 100 kilograms
1 tonneau (T.)	= 1000 kilograms

Approximate Equivalents

1 ounce	= 28.35 grams
1 pound	= 454 grams = .45 kilograms
1 gram	= .035 ounces
1 kilogram	= 2.2 pounds

TROY WEIGHT

24 grains	= 1 pennyweight (pwt.)
20 pennyweights	= 1 ounce
12 ounces	= 1 pound
5760 grains	= 1 pound troy

APOTHECARIES' WEIGHT

20 grains	= 1 scruple
3 scruples	= 1 dram
8 drams	= 1 ounce
12 ounces	= 1 pound

COMMON FRACTIONS IN DECIMAL FORM

8ths	16ths	32ds	64ths		8ths	16ths	32ds	64ths		8ths	16ths	32ds	64ths	
		1	.015625		3	6	12	.359375				23	.703125	
		2	.03125				24	.375				45	.71875	
		3	.046875				25	.390625				46	.734375	
	1	2	.0625				26	.40625		6	12	24	.48	.75
		5	.078125				27	.421875				49	.765625	
		6	.09375			7	14	.4375				50	.78125	
		7	.109375				28	.453125				51	.796875	
1	2	4	.125				29	.46875				52	.8125	
		8	.140625				30	.484375				53	.828125	
		9	.15625		4	8	16	.5				54	.84375	
		10	.171875				31	.515625				55	.859375	
		11	.1875				32	.53125				56	.875	
		12	.203125				33	.546875		7	14	28	.58	.890625
		13	.21875				34	.5625				57	.90625	
		14	.234375			9	18	.578125				58	.921875	
		15	.25				35	.59375				59	.9375	
2	4	8	.265625				36	.609375				60	.953125	
		9	.28125		5	10	20	.625				61	.96875	
		17	.296875				37	.640625				62	.984375	
		18	.3125				38	.65625				63	1.	
	5	10	.328125				39	.671875		8	16	32		
		19	.34375				40	.6875				64		
		20					41							
		21					42							
		22					43							
							44							

SQUARES, SQUARE ROOTS, CUBES, AND CUBIC ROOTS OF NUMBERS 1 TO 100

No.	Sq.	Cube	Sq. Root	Cube Root	No.	Sq.	Cube	Sq. Root	Cube Root	No.	Sq.	Cube	Sq. Root	Cube Root
1	1.000	1.000	1.000	1.000	35	1225	42875	5.916	3.271	68	4624	314432	8.246	4.081
2	4	8	1.414	1.250	36	1296	46656	6.000	3.301	69	4761	320509	8.306	4.101
3	9	27	1.732	1.442	37	1369	50653	6.082	3.332	70	4900	343000	8.366	4.121
4	16	64	2.000	1.537	38	1444	54872	6.164	3.362	71	5041	357011	8.426	4.140
5	25	125	2.236	1.710	39	1521	59310	6.245	3.391	72	5184	373248	8.485	4.160
6	36	216	2.449	1.817	40	1600	64000	6.324	3.420	73	5329	389017	8.544	4.170
7	49	343	2.645	1.913	41	1681	68921	6.402	3.440	74	5476	405224	8.602	4.186
8	64	512	2.828	2.000	42	1764	74088	6.480	3.476	75	5625	421875	8.660	4.217
9	81	729	3.000	2.080	43	1849	79507	6.557	3.503	76	5776	438976	8.717	4.235
10	100	1000	3.162	2.154	44	1936	85184	6.633	3.530	77	5929	456533	8.775	4.254
11	121	1331	3.316	2.224	45	2025	91125	6.708	3.556	78	6084	474552	8.831	4.272
12	144	1728	3.464	2.289	46	2116	97336	6.782	3.583	79	6241	493039	8.888	4.290
13	169	2197	3.605	2.351	47	2209	103023	6.855	3.608	80	6400	512000	8.944	4.308
14	196	2744	3.741	2.410	48	2304	110592	6.928	3.634	81	6561	531441	9.000	4.326
15	225	3375	3.703	2.466	49	2401	117649	7.000	3.659	82	6724	551368	9.055	4.344
16	256	4096	4.000	2.519	50	2500	125000	7.071	3.684	83	6889	571787	9.110	4.362
17	289	4913	4.123	2.571	51	2601	132651	7.141	3.708	84	7056	592704	9.165	4.379
18	324	5832	4.242	2.620	52	2704	140608	7.211	3.732	85	7225	614125	9.210	4.396
19	361	6859	4.358	2.668	53	2809	148877	7.280	3.756	86	7396	636056	9.273	4.414
20	400	8000	4.472	2.714	54	2916	157464	7.348	3.779	87	7569	658503	9.327	4.431
21	441	9261	4.582	2.758	55	3025	166375	7.410	3.803	88	7744	681472	9.380	4.448
22	484	10648	4.690	2.802	56	3136	175616	7.483	3.825	89	7921	704969	9.434	4.464
23	529	12167	4.795	2.843	57	3249	185193	7.549	3.848	90	8100	729000	9.486	4.481
24	576	13824	4.899	2.884	58	3364	195112	7.615	3.870	91	8281	753571	9.539	4.497
25	625	15625	5.000	2.924	59	3481	205379	7.681	3.893	92	8464	776668	9.591	4.514
26	676	17576	5.099	2.962	60	3600	216000	7.746	3.914	93	8649	804357	9.643	4.530
27	729	19683	5.196	3.000	61	3721	226981	7.810	3.936	94	8836	830584	9.695	4.546
28	784	21952	5.291	3.036	62	3844	238328	7.874	3.957	95	9025	858735	9.746	4.562
29	841	24389	5.385	3.072	63	3969	250047	7.937	3.979	96	9216	884736	9.798	4.578
30	900	27000	5.477	3.107	64	4096	262144	8.000	4.000	97	9409	912673	9.848	4.594
31	961	29791	5.567	3.141	65	4225	274625	8.062	4.020	98	9604	941192	9.899	4.610
32	1024	32768	5.656	3.174	66	4356	287496	8.124	4.041	99	9801	970299	9.949	4.626
33	1089	35937	5.744	3.207	67	4489	300763	8.185	4.061	100	10000	1000000	10.000	4.641
34	1156	39304	5.831	3.239										

TABLE OF SIMPLE INTEREST

Time	4%	5%	6%	7%	8%	Time	4%	5%	6%	7%	8%
\$1.00 1 month	\$.003	\$.004	\$.005	\$.005	\$.006	\$100.00 4 days	\$.045	\$.053	\$.066	\$.077	\$.089
" 2 months	.007	.006	.010	.011	.013	" 5 "	.056	.069	.082	.097	.111
" 3 "	.011	.013	.015	.017	.020	" 6 "	.067	.083	.100	.116	.133
" 4 "	.020	.025	.030	.035	.040	" 1 month	.334	.416	.500	.583	.667
" 12 "	.040	.050	.060	.070	.080	" 2 months	.667	.832	1.000	1.166	1.333
\$100.00 1 day	.011	.013	.016	.010	.022	" 3 "	1.000	1.250	1.500	1.750	2.000
" 2 days	.022	.027	.032	.038	.044	" 6 "	2.000	2.500	3.000	3.500	4.000
" 3 "	.034	.041	.050	.058	.067	" 12 "	4.000	5.000	6.000	7.000	8.000

ROMAN AND ARABIC NUMERALS

Roman numerals, because of the difficulty of manipulating them in arithmetic operations, are rarely used today except for more or less formal purposes, such as in giving dates, numbering chapters of a book, or in numbering the steps of an outline.

There are a few simple rules in reading Roman numerals. The repetition of

a letter repeats the value of the letter; C is 100; CC is 200. A letter placed after a letter of greater value increases the value of that letter: X is 10; XI is 11; D is 500; DC is 600. A letter placed before a letter of greater value reduces the value of that letter: V is 5, IV is 4; L is 50, XL is 40; M is 1000, CM is 900.

I	1	VI	6	XI	11	XVI	16	XXX	30	LXXX	80	CCCC	400	CM	900
II	2	VII	7	XII	12	XVII	17	XL	40	XO	90	D	500	M	1000
III	3	VIII	8	XIII	13	XVIII	18	L	50	C	100	DC	600	MM	1900
IV	4	IX	9	XIV	14	XIX	19	LX	60	CC	200	DCC	700	MMM	2000
V	5	X	10	XV	15	XX	20	LXX	70	CCC	300	DCCC	800		

RAPID TABLE OF MULTIPLICATION AND DIVISION

A figure in the top line (19) multiplied by a figure in the last column on the left (18) produces the figure where the top line and the side line meet (342), and so on.

A figure in the table (342) divided by the figure at the top of that column (19) results in the figure (18) at the extreme left; also, a figure in the table (342) divided by the figure (18) at the extreme left gives the figure (19) at the top of the column, and so on.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	1
2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	2
3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	3
4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80	84	88	92	96	100	4
5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	5
6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120	126	132	138	144	150	6
7	14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140	147	154	161	168	175	7
8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160	168	176	184	192	200	8
9	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153	162	171	180	189	198	207	216	225	9
10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	10
11	22	33	44	55	66	77	88	99	110	121	132	143	154	165	176	187	198	209	220	231	242	253	264	275	11
12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240	252	264	276	288	300	12
13	26	39	52	65	78	91	104	117	130	143	156	169	182	195	208	221	234	247	260	273	286	299	312	325	13
14	28	42	56	70	84	98	112	126	140	154	168	182	196	210	224	238	252	266	280	294	308	322	336	350	14
15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360	375	15
16	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272	288	304	320	336	352	368	384	400	16
17	34	51	68	85	102	119	136	153	170	187	204	221	238	255	272	289	306	323	340	357	374	391	408	425	17
18	36	54	72	90	108	126	144	162	180	198	216	234	252	270	288	306	324	342	360	378	396	414	432	450	18
19	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323	342	361	380	399	418	437	456	475	19
20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	500	20
21	42	63	84	105	126	147	168	189	210	231	252	273	294	315	336	357	378	399	420	441	462	483	504	525	21
22	44	66	88	110	132	154	176	198	220	242	264	286	308	330	352	374	396	418	440	462	484	506	528	550	22
23	46	69	92	115	138	161	184	207	230	253	276	299	322	345	368	391	414	437	460	483	506	529	552	575	23
24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	408	432	456	480	504	528	552	576	600	24
25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	25
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	

POSTAL AND TELEGRAPHIC INFORMATION

POSTAL INFORMATION

Mail falls into four general classifications, each with its own scale of rates.

First-Class Mail. Includes letters and written and sealed matter at 3 cents an ounce or fraction of an ounce. Postal cards go at 1 cent each. Special delivery rates on first-class matter are 13 cents up to 2 pounds, 20 cents from 2 pounds to 10 pounds, 25 cents for matter weighing more than 10 pounds. Air mail rates are 8 cents an ounce or fraction of an ounce for domestic mail, higher rates for air mail to United States territories and foreign countries.

Second-Class Mail. Includes newspapers, magazines, and other periodicals containing notice of second-class entry. When sent by others than the publisher, it is 1 cent for each 2 ounces or fraction of 2 ounces, or the fourth-class rate, whichever is lower.

Third-Class Mail. Includes circulars and other miscellaneous printed matter, also merchandise, at 1½ cents for each 2 ounces. Is limited to 8 ounces. Books and catalogues of 24 pages or more, seeds, cuttings, bulbs, roots, scions, and plants go at 1 cent for each 2 ounces. Bulk lots of identical pieces may be mailed in quantities of not less than 20 pounds or 200 pieces at pound rates with a minimum charge of 1 cent a piece.

Fourth-Class Mail (Parcel Post). Includes matter over 8 ounces. Is limited to matter measuring 100 inches, length and girth combined, and weighing less than 70 pounds. Parcels may be sent at zone rates as in table in first column of page 283.

Exceptions

(1) In the first or second zone, where the distance by the shortest regular practicable mail route is 300 miles or more, the rate is the same as for the third zone.

(2) On parcels collected on rural routes the postage is 2 cents less per parcel than shown in the foregoing table when for local delivery and 3 cents less per parcel when for other than local delivery.

(3) Parcels weighing less than 10 pounds measuring over 84 inches but not more than 100 inches in length and girth combined are subject to a minimum charge equal to that for a 10-pound parcel for the zone to which addressed.

Book Rates

Books of 24 pages or more, consisting wholly of reading matter and containing no advertising matter may be sent at the following rates:

Lbs.	Postage	Lbs.	Postage	Lbs.	Postage
1....	\$0.04	25....	.77	49....	1.51
2....	.07	26....	.80	50....	1.55
3....	.10	27....	.83	51....	1.58
4....	.13	28....	.87	52....	1.61
5....	.16	29....	.90	53....	1.64
6....	.19	30....	.93	54....	1.67
7....	.22	31....	.96	55....	1.70
8....	.25	32....	.99	56....	1.73
9....	.28	33....	1.02	57....	1.76
10....	.31	34....	1.05	58....	1.79
11....	.34	35....	1.08	59....	1.82
12....	.37	36....	1.11	60....	1.85
13....	.40	37....	1.14	61....	1.88
14....	.43	38....	1.17	62....	1.92
15....	.46	39....	1.21	63....	1.95
16....	.49	40....	1.24	64....	1.98
17....	.53	41....	1.27	65....	2.01
18....	.56	42....	1.30	66....	2.04
19....	.59	43....	1.33	67....	2.07
20....	.62	44....	1.36	68....	2.10

There is also a special rate for catalogues and similar printed advertising matter.

PARCEL POST RATES BY ZONES

		Zones							
		1-2	3	4	5	6	7	8	
Weight in pounds	Local	Up to 150 miles	150 to 300 miles	300 to 600 miles	600 to 1000 miles	1000 to 1,400 miles	1,400 to 1,800 miles	Over 1,800 miles	
		\$0.08	\$0.09	\$0.10	\$0.11	\$0.12	\$0.13	\$0.16	\$0.16
1	..	.09	.11	.12	.15	.18	.20	.24	.27
2	..	.09	.12	.14	.18	.23	.27	.33	.38
3	..	.10	.13	.16	.22	.28	.34	.42	.49
4	..	.10	.14	.18	.25	.34	.41	.52	.61
5	..	.11	.15	.20	.29	.39	.48	.61	.72
6	..	.11	.16	.22	.32	.44	.56	.70	.83
7	..	.12	.17	.24	.36	.50	.63	.79	.95
8	..	.12	.18	.26	.39	.66	.70	.89	1.06
9	..	.13	.19	.28	.43	.61	.77	.98	1.17
10	..	.13	.20	.30	.46	.66	.84	1.07	1.29
11	..	.14	.22	.32	.50	.72	.92	1.16	1.40
12	..	.14	.23	.34	.54	.77	.99	1.26	1.61
13	..	.16	.24	.36	.58	.82	1.06	1.35	1.63
14	..	.16	.25	.38	.61	.89	1.13	1.44	1.74
15	..	.16	.26	.40	.65	.94	1.21	1.53	1.85
16	..	.16	.27	.42	.68	.99	1.28	1.63	1.97
17	..	.17	.28	.44	.72	1.05	1.35	1.72	2.08
18	..	.17	.29	.46	.75	1.10	1.42	1.81	2.19
19	..	.18	.30	.48	.79	1.16	1.49	1.91	2.31
20	..	.18	.31	.50	.82	1.21	1.57	2.00	2.42
21	..	.19	.33	.53	.87	1.27	1.64	2.09	2.53
22	..	.19	.34	.55	.90	1.32	1.71	2.18	2.65
23	..	.20	.35	.57	.94	1.37	1.78	2.28	2.76
24	..	.20	.36	.59	.97	1.43	1.85	2.37	2.87
25	..	.21	.37	.61	1.01	1.48	1.93	2.46	2.99
26	..	.21	.38	.63	1.04	1.53	2.00	2.55	3.10
27	..	.22	.39	.65	1.08	1.60	2.07	2.65	3.21
28	..	.22	.40	.67	1.11	1.65	2.14	2.74	3.33
29	..	.23	.41	.69	1.15	1.70	2.21	2.83	3.44
30	..	.23	.42	.71	1.18	1.75	2.29	2.93	3.55
31	..	.24	.44	.73	1.23	1.81	2.36	3.02	3.67
32	..	.24	.45	.75	1.26	1.86	2.43	3.11	3.78
33	..	.25	.46	.77	1.30	1.92	2.60	3.20	3.89
34	..	.25	.47	.79	1.33	1.98	2.58	3.30	4.01
35	..	.26	.48	.81	1.37	2.03	2.65	3.39	4.12
36	..	.26	.49	.83	1.40	2.08	2.72	3.48	4.23
37	..	.27	.50	.85	1.44	2.14	2.79	3.57	4.35
38	..	.27	.52	.88	1.47	2.19	2.86	3.67	4.46
39	..	.28	.53	.90	1.51	2.25	2.94	3.76	4.57
40	..	.28	.54	.92	1.55	2.30	3.01	3.85	4.69
41	..	.29	.56	.94	1.59	2.36	3.08	3.94	4.80
42	..	.29	.57	.96	1.62	2.41	3.15	4.04	4.91
43	..	.30	.58	.98	1.66	2.46	3.22	4.13	5.03
44	..	.30	.59	1.00	1.69	2.52	3.30	4.22	5.14
45	..	.31	.60	1.02	1.73	2.58	3.37	4.32	5.25
46	..	.31	.61	1.04	1.76	2.63	3.44	4.41	5.37
47	..	.32	.62	1.06	1.80	2.69	3.51	4.60	5.48
48	..	.32	.63	1.08	1.83	2.74	3.58	4.59	5.59
49	..	.33	.64	1.10	1.87	2.79	3.66	4.69	5.71
50	..	.33	.65	1.12	1.91	2.84	3.73	4.78	5.82
51	..	.34	.67	1.14	1.95	2.90	3.80	4.87	5.93
52	..	.34	.68	1.16	1.98	2.96	3.87	4.96	6.05
53	..	.35	.69	1.18	2.02	3.01	3.94	5.06	6.16
54	..	.35	.70	1.21	2.05	3.07	4.02	5.15	6.27
55	..	.36	.71	1.23	2.09	3.12	4.09	5.24	6.37
56	..	.36	.72	1.25	2.12	3.17	4.16	5.34	6.46
57	..	.37	.73	1.27	2.16	3.23	4.23	5.43	6.60
58	..	.37	.74	1.29	2.19	3.29	4.31	5.52	6.73
59	..	.38	.75	1.31	2.24	3.34	4.38	5.61	6.84
60	..	.38	.76	1.33	2.27	3.39	4.45	5.71	6.95
61	..	.39	.78	1.35	2.31	3.45	4.62	5.80	7.07
62	..	.39	.78	1.37	2.34	3.50	4.59	5.88	7.18
63	..	.40	.80	1.39	2.38	3.55	4.67	5.98	7.29
64	..	.40	.81	1.41	2.41	3.62	4.74	6.08	7.41
65	..	.41	.82	1.43	2.45	3.67	4.81	6.17	7.52
66	..	.41	.83	1.45	2.48	3.72	4.88	6.26	7.63
67	..	.42	.84	1.47	2.52	3.78	4.95	6.36	7.75
68	..	.42	.85	1.49	2.55	3.83	5.03	6.45	7.86
69	..	.43	.87	1.51	2.60	3.88	5.10	6.54	7.97

Insured Mail. Domestic third- and fourth-class matter may be insured against loss, rifling, or damages at a charge of 3 cents for amounts of 1 cent to \$5, 10 cents for \$5.01 to \$25, 15 cents for \$25.01 to \$50, and 25 cents for \$50.01 to \$200.

Registered Mail. Domestic and foreign mail may be registered at rates ranging from 20 cents to \$1.35.

C.O.D. Mail. Third- and fourth-class mail may be sent collect-on-delivery at rates ranging from 15 cents to 60 cents, with a maximum value of \$200.

Money Orders. Money may be sent through postal money orders in amounts up to \$100, but there is no limit on the number of money orders that may be issued to a person in one day. The rates are:

	Cents
From \$0.01 to \$2.50	6
From \$2.61 to \$5	8
From \$5.01 to \$10	11
From \$10.01 to \$20	13
From \$20.01 to \$40	16
From \$40.01 to \$60	18
From \$60.01 to \$80	20
From \$80.01 to \$100	22

Special Handling Service. Fourth-class matter may be sent by this service, which means that it is entitled to prompt distribution, dispatch, and the most expeditious handling and transportation practicable, but not to immediate delivery at the office of destination. The rates are 10 cents for parcels weighing not more than 2 pounds, 15 cents between 2 and 10 pounds, and 20 cents for parcels over 10 pounds.

Postal Savings. Persons over 10 years of age may open interest bearing accounts in post offices with a minimum of one dollar. The maximum balance allowed a depositor is \$2500.

Unmailable Matter. Includes not only matter not conforming to the rules as to legibility of address and size of package, but also pistols, revolvers, or other firearms that can be concealed on the person; game, etc., killed out of season, poisons, explosive

or inflammable articles; all spirituous and malt liquors; all liquor advertisements to and from Prohibition localities; indecent matter; dunning postals and lottery, endless chain, and fraud matter.

Recalling Mail. Mail may be recalled after it has been posted by filling out a special form. The recaller must pay any expenses involved in recalling the mail.

TELEGRAMS AND CABLES

Telegrams and cables may be sent under various classifications, with different rates applying to each. The choice of classification should be made on the basis of the cost and urgency of the message.

The quickest telegraphic service is provided by the regular telegram, which has right of way over all other kinds of messages. It may be sent at any time of the day or night. The minimum charge is for ten words, with additional charges for further groups of ten words or fractions of ten.

Subordinate to the telegram is the day letter, cost of which is reckoned on the basis of fifty words. Fifty words may be sent for about one and a half times as much as the ten-word telegram. The delay in transmission is usually slight. Code language may be used.

The night letter is the cheapest service for long messages. The minimum charge is for twenty-five words. It is accepted any time during the day and up to two o'clock in the morning for delivery the following day. Code language may be used.

Marks of punctuation are counted as full words in all telegrams. Numbers should be written out. Figures are counted as one word for every five characters. Abbreviations are counted as full words. Words from foreign languages may be used. Groups of letters which are not found in dictionaries are counted at the rate of five letters

to a word. Ordinary addresses and signatures are not charged for.

Cable service is far more expensive than telegrams and, consequently, many users of cables have adopted cable codes. The standard code style is known as "cablese" and is used by newspaper correspondents. In cablese the phrase "from the city," for example, would appear as "excitv." Code words may not be more than ten letters long and should be pronounceable. Unpronounceable code words are charged at the rate of five characters to a word.

The most rapid service is the full rate cable. Deferred cablegrams are taken at half rates or less and are sent when the cable wires are clear. Deferred cablegrams must be written in the language of the country of their origin, or destination, or in French. Another deferred service is the cable letter. No code may be used in the cable letter. Week-end cable letters are another service. They may be filed any time during the week up to Saturday for delivery the following Monday morning. The minimum charge is for twenty words.

Addresses and signatures are counted and charged for in all cables. Many frequent users of cable service have special code cable addresses registered with the cable companies. The charge for this service is \$2.50 a year.

LEGAL FORMS

Bill of Sale

Know all men by these presents, that I, JOHN DOE, residing at No. _____ Street, (City), County of _____, State of _____, party of the first part, for and in consideration of the sum of _____ lawful money of the United States, to me in hand paid, at or before the ensembling and delivery of these presents by RICHARD ROE, residing at No. _____ Street, (City), County of _____, State of _____, party of the second part, the receipt whereof is hereby acknowledged bargained and sold, and by these presents do I grant and convey unto the said party of the second part, his executors, administrators and assigns all the goods and chattels described in the schedule hereunto annexed and hereby made a part of this instrument, which said goods and chattels are now at No. _____ Street, (City), County of _____, State of _____.

To have and to hold the same unto the said party of the second part, his executors, administrators and assigns for ever. And I do for myself, my heirs, executors and administrators, covenant and agree, to and with the said party of the second part, to warrant and defend the sale of the said goods and chattels hereby sold unto the said party of the second part, his executors, administrators and assigns against all and every person and persons whomsoever.

In witness whereof, I have hereunto set my hand and seal the _____ day of _____ in the year one thousand nine hundred _____.

Sealed and delivered in the presence of _____.

(Here list goods sold)

Lease—Short Form

This indenture, made the _____ day of _____, nineteen hundred and _____ between JOHN DOE, of No. _____ Street, (City), (State) party of the first part, and RICHARD ROE, of No. _____ Street, (City), (State), _____, party of the second part, *witnesseth,* that the said party of the first part has letten, and by these presents does grant, demise, and to farm let, unto the said party of the second part, all that piece and parcel of land known as (give common name), noted on the land map of _____ County as being in Section No. _____, Block No. _____, more particularly described as follows (here insert description by metes and bounds), together with the buildings thereon and with the appurtenances, for the term of _____ from the _____ day _____ nineteen hundred and _____ at the _____ rent or sum of _____ to be paid in equal (here insert time of payment of rent).

And it is agreed that if any rent shall be due and unpaid, or if default shall be made in any of the covenants herein contained, then it shall be lawful for the said party of the first part to re-enter the said premises and the same to have again, repossess and enjoy.

And the said party of the second part does covenant to pay to the said party of the first part the said yearly rent as herein specified.

And at the expiration of the said term the said party of the second part will quit and surrender the premises hereby demised, in as good state and

condition as reasonable use and wear thereof will permit, damages by the elements excepted.

And the said party of the first part does covenant that the said party of the second part, on paying the said yearly rent, and performing the covenants aforesaid, shall and may peaceably and quietly have, hold and enjoy the said demised premises for the term aforesaid.

And it is further understood and agreed that the covenants and agreements contained in the within lease are binding on the parties hereto and their legal representatives.

In witness whereof, the parties to these presents have hereunto set their hands and seals the day and year first above written.

Sealed and delivered in the presence of:

JOHN DOE (seal)

RICHARD ROE (seal)

(Acknowledgments)

Assignment of Lease—Short Form

Know that JOHN DOE, of No. _____ Street, (City), County of _____, State of _____, Assignor, in consideration of _____ Dollars, paid by RICHARD ROE, of No. _____ Street, (City), County of _____, State of _____

_____, Assignee, hereby assigns unto the assignee, _____, a certain lease by the A-B-C Realty Corporation, a corporation organized and existing under the laws of the State of _____, of the premises known and described as No. _____ Street, (City), County of _____, State of _____

dated the _____ day of _____ and recorded on the _____ day of _____ in the office of the _____ of the County of _____ in liber _____ of conveyances, at page _____ covering premises, described therein.

Together with the premises therein described, and the buildings thereon, with the appurtenances.

To have and to hold the same unto the assignee, his heirs, executors, administrators or assigns, from the _____ day of _____, nineteen hundred and _____ for all the rest of the term of _____ years mentioned in the said lease, subject to the rents, covenants, conditions and provisos therein also mentioned.

And the Assignor hereby covenants that the said assigned premises are free from incumbrances.

In witness whereof, the assignor has hereunto set his hand and affixed his seal this _____ day of _____, 19____. In presence of:

Power of Attorney (General)

Know all men by these presents, that I, JOHN DOE, of (City), County of _____, State of _____, being about to depart from this country for a trip around the world, have made, constituted and appointed, and by these presents do make, constitute and appoint RICHARD ROE, of (City), County of _____, State of _____, my true and lawful attorney for me, and in my name, place and stead, to do any and all acts which I would personally do if present, hereby intending to give him the fullest power, and not intending by anything hereinafter contained to limit or cut down such power, giving and granting unto him full power to ask, demand, sue for, recover, and receive all manner of goods, chattels, debts, rents, interest, sums of money and demands whatsoever, due or hereafter to become due and owing or belonging to me on any account, and to make, give and execute acquittances, receipts, releases or other discharges, for the same, whether under seal or otherwise, and to make, execute, indorse, accept and deliver in my name or in the name of my said attorney,

all checks, notes, drafts, warrants, acknowledgments, agreements and all other instruments in writing of whatsoever nature, as to my said attorney may seem needful.

With full power and authority to sell, transfer or do any other act concerning any stocks or bonds which I may possess, and to transfer the same in any manner required by any corporation, company or law; with full power and authority to enter into or take possession of any and all lands, real estate, tenements, houses or other buildings, or parts thereof belonging to me, whether vacant or otherwise or to the possession of which I may be or may become entitled, and to receive and take for me and in my name and to my use all or any rents, profits, or issues of any real estate belonging to me, and to let the same in such manner as my attorney shall deem needful and proper and from time to time, to renew any and all leases and mortgages and writings in that behalf, requisite and necessary for me and in my name to commence and prosecute any suits or actions or other legal proceedings for the recovery of the possession of any such lands or property or for any goods, chattels, debts, duties, demands, cause or thing, whatsoever, due or to become due or belonging to me and to prosecute and follow and discontinue the same, if he shall deem proper, and for me and in my name to take all steps and remedies necessary and proper for the conduct and management of my affairs and business and for the recovery, receiving, obtaining and holding possession of any lands, tenements, rents or real estate, goods and chattels, debts, interest, demands, duties, sum or sums of money or any other thing whatsoever, that is or shall be by my said attorney thought to be due, owing, belonging to or payable to me in my own right or otherwise; and also for me and in my name and stead, to appear, answer and defend in all

actions and suits whatsoever, which may be commenced against me; and also for me and in my name to compromise, settle and adjust with each and every person or persons, all actions, accounts, dues and demands, subsisting or to subsist between them or any of them, and in such manner as my said attorney shall think proper; and for the better doing, executing or performing of any or all of the premises, I do hereby further give unto my said attorney full power to constitute, appoint and authorize in his place and stead and as his substitute, one or more attorney or attorneys for me with full power of revocation, hereby giving to my said attorney power and authority to do, execute and perform and finish for me and in my name all and singular those things which shall be expedient or necessary, in and about, for or concerning the premises, or any of them, as fully as I, the said JOHN DOE, could do if personally present, hereby ratifying and confirming whatever my said attorney or his substitute shall do or cause to be done in, about or concerning the premises, or any part thereof.

In witness whereof, I have hereunto set my hand and seal this ____ day of _____, 19____.

(Signed) JOHN DOE.

(Acknowledgment)

Power of Attorney—Revocation

Know all men by these presents, that whereas I, JOHN DOE, did in my letter of attorney, dated the ____ day of _____, 19____, constitute and appoint JOHN SMITH my true and lawful attorney for me and in my name to (here insert power given in the original power of attorney) as by my said letter of attorney appears; Now, therefore, I, the said JOHN DOE, by these presents do hereby revoke, countermand, annul and make void said

letter of attorney dated the _____ day of _____, 19____, and all power therein and thereby, or in any manner given, or intended to be given to the said JOHN SMITH.

In witness whereof I have hereunto set my hand and seal this _____ day of _____, 19____.

JOHN DOE.

Sealed and delivered in the presence of:

(Acknowledgment)

Proxy

Know all men by these presents, that I, JOHN SMITH, of Toledo, State of Ohio, do hereby constitute and appoint WILLIAM JONES, of Cleveland, State of Ohio, my attorney for me, and in my name, place, and stead, to vote at any stockholders' meeting of the A-B-C Metal Company, a corporation, for the choice or election of directors, on the first day of January, nineteen hundred and _____, or at any adjourned or special meeting of stockholders of said corporation thereafter, during the year ensuing, and until this power is revoked, on all the shares of stock of said corporation, on which I would have right to vote, and in the same manner as I would do, were I then personally present, with power to substitute an attorney under him, for like purposes.

Witness my hand and seal, at Toledo, this fifth day of December, nineteen hundred and _____.

Witness: HARRY WILLIAMS.

JOHN SMITH (Seal).

Article of Co-partnership

Article of agreement, made the _____ day of _____ nineteen hundred and _____ between JOHN DOE, of No. _____ Street, (City), (State), and RICHARD ROE, of No.

_____ Street, (City), (State), as follows: The said parties above named have agreed to become co-partners in business, to sell hardware and by these presents do agree to be co-partners together under and by the name or firm of DOE AND ROE in the buying, selling and vending of all sorts of goods, wares and merchandise to the said business belonging, and to occupy the suite of offices (here describe the firm property), their co-partnership to commence on the _____ day of _____ and to continue for the term of _____ years, that is to say until the _____ day of _____, 19____, and to that end and purpose the said JOHN DOE agrees to deposit in the _____ bank _____ dollars in the firm name by the _____ day of _____, 19____, and the said RICHARD ROE agrees to deposit in the _____ bank, _____ dollars in the firm name by the _____ day of _____, 19____ (or any property that each is to contribute), to be used and employed in common between them for the support and management of the said business, to their mutual benefit and advantage.

And it is agreed by and between the parties to these presents, that at all times during the continuance of their co-partnership, they and each of them will give their attendance, and do their and each of their best endeavors, and to the utmost of their skill and power, exert themselves for their joint interest, profit, benefit and advantage, and truly employ, buy, sell, and merchandise with their joint stock, and the increase thereof, in the business aforesaid.

And also, that they shall and will at all times during the said co-partnership, bear, pay, and discharge equally between them, all rents, and other expenses that may be required for the support and management of the said business; and that all gains, profit and increase that shall come, grow or arise from or by means of their said business,

shall be divided between them, in the following proportions:— to the said JOHN DOE—50%; to the said RICHARD ROE—50%, and all loss that shall happen to their joint business by ill commodities, bad debts or otherwise, shall be borne and paid between them.

And it is agreed by and between the said parties, that there shall be had and kept at all times during the continuance of their co-partnership, perfect, just, and true books of account, wherein each of said co-partners shall enter and set down, as well all money by them or either of them received, paid, laid out and expended in and about the said business, as also all goods, wares, commodities and merchandise, by them or either of them bought or sold, by reason or on account of the said business, and all other matters and things whatsoever, to the said business and the management thereof in anywise belonging; which said books shall be used in common between the said co-partners, so that either of them may have access thereto, without any interruption or hindrance of the other.

And also, the said co-partners, once in (here insert stated periods when accounts shall be made) or oftener if necessary, shall make, yield and render, each to the other, a true, just and perfect inventory and account of all profits and increase by them, or either of them made, and all losses by them, or either of them, sustained; and also all payments, receipts, disbursements and all other things by them made, received, disbursed, acted, done, or suffered in this said co-partnership and business; and the same account so made shall and will clear, adjust, pay and deliver, each to the other, at the time their just share of the profits so made as aforesaid.

And the said parties hereby mutually covenant and agree, to and with each other, that during the continuance of the said co-partnership, neither of

them, shall nor will endorse any note, or otherwise become surety for any person or persons whomsoever, without the consent of the other of the said co-partners. And at the end or other sooner termination of their co-partnership the said co-partners, each to the other, shall and will make a true, just and final account of all things relating to their said business, and in all things truly adjust the same; and all and every the stock and the stocks, as well as the gains and increase thereof, which shall appear to be remaining, either in money, goods, wares, fixtures, debts or otherwise, shall be divided between them.

In witness whereof, the parties have on the day first above written, affixed their hands and seals.

Sealed and delivered in the presence of:

JOHN DOE (Seal).

RICHARD ROE (Seal).

(Acknowledgment)

Dissolution of Partnership

This agreement made the _____ day of _____ one thousand nine hundred _____ between JOHN DOE, of No. _____ Street, (City), (State), party of the first part and RICHARD ROE, of No. _____ Street, (City), (State), party of the second part,

Witnesseth: whereas the parties hereto have formed a co-partnership for the purpose of selling hardware under the firm name of DOE AND ROE and have maintained and continued said partnership up to the present time, and

Whereas the parties hereto have agreed that the partnership existing between them should be dissolved and at an end, and

Whereas an accounting of the assets and liabilities of the said firm has been duly had by the parties hereto, for the purpose of ascertaining the condition

of said co-partnership business, and on said accounting it was found that a true statement of the conditions and of the affairs of such co-partnership are as set forth in the schedule of assets and liabilities hereto annexed, and made part hereof, and

Whereas the parties hereto have agreed to distribute said assets in the following manner: to JOHN DOE—50% of all the assets, to RICHARD ROE—50% of all assets.

Now in consideration of the sum of One Dollar each to the other in hand paid, the receipt whereof is hereby acknowledged, and in consideration of the foregoing premises the parties hereto agree to terminate and dissolve said co-partnership and each of the parties hereto hereby severally releases the other of and from any and all manner of obligations growing out of the said partnership, and it is further

Agreed that the party of the first part, in consideration of the sum of _____ dollars paid to him by the party of the second part the receipt whereof is hereby acknowledged, has transferred, assigned and set over and by these presents does assign, transfer and set over unto said party of the second part, his executors, administrators and assigns, all right, title, interest and share of, in and into the assets and property of every kind, nature and description of said partnership, together with the good will of the business thereof, and it is further

Agreed that none of said partners has signed or endorsed the firm name to any commercial paper, nor other evidence of debt, nor incurred any obligation nor liability, contingent or actual, in behalf of said co-partnership, except as mentioned or included in the accounting herein set forth, and it is further

Agreed by the parties hereto that the party of the first part shall and will pay and discharge all the firm obligations and liabilities referred to

and mentioned in the accounting hereinbefore set forth, without contribution by the party of the second part thereto; and that the said party of the first part does hereby agree to save, indemnify and keep harmless the said party of the second part of and from any and all such firm obligations and liabilities and of and from all damage, cost, charge and expense occurring through the default or failure of the party of the first part to promptly and fully pay and discharge the same.

In witness thereof, the parties hereto have hereunto set their hands and seals, the day and year first above written.

Witness:

(Signed) JOHN DOE (Seal).
RICHARD ROE (Seal).

(Acknowledgment)

Deed with Full Covenants

This indenture, made the _____ day of _____ between JOHN DOE, of No. _____ Street, (City), (State), party of the first part, and RICHARD ROE, of No. _____ Street, (City), (State).

_____, party of the second part: *witnesseth*, that the party of the first part, in consideration of _____ dollars lawful money of the United States, paid by the party of the second part, does hereby grant and release unto the party of the second part, his heirs, executors, administrators, (if a corporation, "successors" instead of foregoing) and assigns forever, all that piece and parcel of land, known and described as No. _____ Street, (City), (State), and noted on the land map of _____ County as being Section No. _____, Block No. _____, more particularly described as follows: (Here insert description from prior deeds. Also what mortgages the conveyance is subject to if any. Describe mortgage by giving its amount, due

date, interest, mortgagee, liber and page numbers in register's office where recorded.)

together with the appurtenances and all the estate and rights of the party of the first part in and to said premises.

To have and to hold the premises herein granted unto the party of the second part _____ and assigns forever.

And said JOHN DOE covenants as follows:

First: That said JOHN DOE is seized of the said premises in fee simple, and has good right to convey the same;

Second: That the party of the second part shall quietly enjoy the said premises;

Third: That the said premises are free from incumbrances; except as hereinbefore set forth.

Fourth: That the party of the first part will execute or procure any further necessary assurance of the title to said premises;

Fifth: That said JOHN DOE will forever warrant the title to said premises.

In witness whereof, the party of the first part has hereunto set his hand and seal the day and year first above written.

In presence of

(Signed) JOHN DOE (Seal).

(Acknowledgment)

Quit-Claim Deed

This indenture, made the _____ day of _____, nineteen hundred and _____ between JOHN DOE, of No. _____ Street, (City), (State), party of the first part, and RICHARD ROE, of No. _____ Street, (City), (State), _____, party of the second part, *witnesseth*, that the party of the first part, in consideration of _____ dollars, lawful money of the United States, and other good and valuable considerations to

the party of the first part in hand paid by the party of the second part, does hereby remise, release and quit-claim unto the party of the second part, his heirs, executors, administrators (if a corporation "successors" instead of foregoing) and assigns forever. *All* that piece and parcel of land known and described as No. _____ Street, (City), (State), and noted upon the land map of _____ County, as being Section No. _____, Block No. _____ and more particularly described as follows: (Here insert description from prior deed.)

Together with the appurtenances and all the estate and rights of the party of the first part in and to said premises.

To have and to hold the premises herein granted unto the party of the second part, his heirs, administrators, executors and assigns forever.

In witness whereof, the party of the first part has hereunto set his hand and seal the day and year first above written.

In presence of

(Signed) JOHN DOE (Seal).

(Acknowledgment)

Real Estate Mortgage

This mortgage, made the _____ day of _____, nineteen hundred and _____, between JOHN DOE, of No. _____ Street, (City), (State), the mortgagor, and RICHARD ROE, of No. _____ Street, (City), (State), _____, the mortgagee *witnesseth*, that to secure the payment of an indebtedness in the sum of _____ dollars, lawful money of the United States, to be paid (here insert time of payment) with interest thereon (here insert rate of interest and when it is payable) according to a certain bond or obligation.

bearing even date herewith, the mortgagor hereby mortgages to the mortgagee all that piece or parcel of land, with the buildings thereon, known as No. _____ Street, (City), (State), and noted upon the land map of _____ County, as Section No. _____, Block No. _____.

Together with all fixtures and articles of personal property, now or hereafter attached to, or used in connection with, the premises, all of which are covered by this mortgage.

And the mortgagor covenants with the mortgagee as follows:

1. That the mortgagor will pay the indebtedness as hereinbefore provided.

2. That the mortgagor will keep the buildings on the premises insured against loss by fire for the benefit of the mortgagee.

3. That no building on the premises shall be removed or demolished without the consent of the mortgagee.

4. That the whole of said principal sum shall become due after default in the payment of any installment of principal or of interest for thirty days, or after default in the payment of any tax, water rate or assessment for thirty days after notice and demand.

5. That the holder of this mortgage, in any action to foreclose it, shall be entitled to the appointment of a receiver.

6. That the mortgagor will pay all taxes, assessments or water rates, and in default thereof, the mortgagee may pay the same.

7. That the mortgagor within six days upon request in person or within thirty days upon request by mail will furnish a statement of the amount due on this mortgage.

8. That notice and demand or request may be in writing and may be served in person or by mail.

9. That the mortgagor warrants the title to the premises:

10. That in case of a sale, said premises, or so much thereof as may be affected by this mortgage, may be sold in one parcel.

11. That the whole of the principal sum shall become due at the option of the mortgagee after default for thirty days after notice and demand in the payment of any installment of any assessment for local improvement heretofore or hereafter laid which is or may become payable in annual installments, and which has affected, now affects or hereafter may affect the said premises, notwithstanding that such installments be not due and payable at the time of such notice and demand; that the whole of said principal sum shall become due at the option of the mortgagee, upon the actual or threatened demolition or removal of any building erected or to be erected upon said premises, and in the event of such demolition or removal of any building the interest on the indebtedness secured by this mortgage shall be at the rate of six per centum per annum from the date of the commencement of such demolition or removal, if such interest rate at that time be less than six per centum per annum; and also that the whole of said principal sum shall become due at the option of the mortgagee upon any default in keeping the buildings on the premises insured against loss by fire as required by paragraph numbered "2" above.

12. In the event of the passage after the date of this mortgage of any law of the State of _____, deducting from the value of the land for the purpose of taxation any lien thereon, or changing in any way the laws for the taxation of mortgages or debts secured by mortgage for State or local purposes, or the manner of the collection of any such taxes, so as to affect this mortgage, the holder of this mortgage and of the debt which it secures, shall have the right to give thirty days' written notice to the owner of the land

requiring the payment of the mortgage debt. If such notice be given, the said debt shall become due, payable and collectible at the expiration of said thirty days.

13. That the holder of this mortgage, in any action to foreclose it, shall be entitled (without notice and without regard to the adequacy of any security for the debt), to the appointment of a receiver of the rents and profits of said premises; and in the event of any default in paying said principal or interest, such rents and profits are hereby assigned to the holder of this mortgage as further security for the payment of said indebtedness.

14. If any action or proceeding be commenced (except an action to foreclose this mortgage or to collect the debt secured thereby) to which action or proceeding the holder of this mortgage is made a party, or in which it becomes necessary to defend or uphold the lien of this mortgage, all sums paid by the holder of this mortgage for the expense of any litigation to prosecute or defend the rights and lien created by this mortgage (including reasonable counsel fees), shall be paid by the mortgagor, together with interest thereon at the rate of six per cent per annum, and any such sum and the interest thereon shall be a lien on said premises, prior to any right, or title to, interest in or claim upon said premises attaching or accruing subsequent to the lien of this mortgage, and shall be deemed to be secured by this mortgage and by the bond which it secures. In any action or proceeding to foreclose this mortgage, or to recover or collect the debt secured thereby, the provisions of law respecting the recovery of costs, disbursements and allowances shall prevail unaffected by this covenant.

15. That the whole of said principal sum shall become due at the option of the mortgagee if the buildings on said

premises are not maintained in reasonably good repair, after notice of the condition of the building is given to the mortgagor, or upon the failure of any owner of said premises to comply with the requirements of any Department of the State or City of _____, within three months after an order making such requirement has been issued by said State or City Department, or upon the failure of any owner of said premises or any person holding under said owner as tenant, lessee or otherwise, to comply with the laws and statutes enacted by the Congress of the United States.

In witness whereof, this mortgage has been duly executed by the mortgagor.

In presence of:

(Signed) JOHN DOE.

(2 Witnesses)

(Acknowledgment)

Mortgage on Goods or Chattels

To all to whom these presents shall come, know ye that, I, JOHN DOE, of No. _____ Street, (City), (State), party of the first part, for securing the payment of the money hereinafter mentioned, and in consideration of the sum of one dollar to me duly paid by RICHARD ROE, of No. _____ Street, (City), (State), party of the second part, at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, have bargained and sold, and by these presents do grant, bargain and sell unto the said party of the second part, (here insert goods sold) and all other goods and chattels mentioned in the schedule hereunto annexed, and now in the (here insert location of goods) to have and to hold, all and singular the goods and chattels above bargained and sold, or intended so to be, unto the said party of the second part, his executors, adminis-

trators and assigns for ever. And JOHN DOE, the said party of the first part, for his heirs, executors and administrators, all and singular the said goods and chattels above bargained and sold unto the said party of the second part, his heirs, executors, administrators and assigns, against JOHN DOE the said party of the first part and against all and every person or persons whomsoever, shall and will warrant, and for ever defend. Upon condition, that if JOHN DOE the said party of the first part, shall and do well and truly pay unto the said party of the second part, his executors, administrators or assigns, (here insert the sum of money owing, the time of payment, rate of interest, interest dates, etc.), then these presents shall be void. And JOHN DOE the said party of the first part, for his executors, administrators and assigns, does covenant and agree to and with the said party of the second part, his executors, administrators and assigns, that in case default shall be made in the payment of the said sum above mentioned, or any part thereof then it shall and may be lawful for, and JOHN DOE the said party of the first part, does hereby authorize and empower the said party of the second part, his executors, administrators and assigns, with the aid and assistance of any person or persons, to enter his dwelling-house, store, and other premises, and such other place or places as the said goods or chattels are or may be placed, and take and carry away the said goods or chattels, and to sell and dispose of the same for the best price they can obtain; and out of the money arising therefrom, to retain and pay the said sum above mentioned, including interest, cost of sale, etc., and all charges touching the same; rendering the overplus (if any) unto JOHN DOE or to his executors, administrators or assigns. And until default be made in the payment of the said sum of money it is understood and agreed that JOHN DOE

is to remain and continue in the quiet and peaceable possession of the said goods and chattels, and the full and free enjoyment of the same. If from any cause said property shall fail to satisfy said debt, interest, costs and charges, the said JOHN DOE, party of the first part, covenants and agrees to pay the deficiency.

In witness whereof, JOHN DOE, the said party of the first part, has hereunto set his hand and seal the _____ day of _____ one thousand nine hundred _____.

Scaled and delivered in the presence of

(Signed) JOHN DOE (Seal)
(Acknowledgment)

(Here follows the schedule referred to in the contract.)

Will

I, JOHN DOE, of the city of _____, State of _____ being of sound and disposing mind and memory, do hereby make, publish and declare this to be my Last Will and Testament, and hereby revoke all Wills and Codicils by me at any time heretofore made.

First: I direct that all my just debts, funeral and testamentary expenses be paid by the executrix hereinafter named as soon as conveniently may be after my decease.

Second: I give, devise and bequeath unto my son, JAMES DOE, One Thousand Dollars (\$1,000).

Third: All the rest, residue and remainder of my estate, both real and personal, of whatsoever kind and nature, and wheresoever the same may be situate, of which I shall be seized or possessed, or to which I may in any way be entitled at the time of my death, I give, devise and bequeath unto my beloved wife, KATE DOE, to be hers absolutely.

In the event that my said wife shall predecease me, or that we shall die in

the same accident, then in either of such events, I hereby give, devise and bequeath my entire residuary estate to my friend, RICHARD ROE, of the city of _____, state of _____.

In the event that my said wife shall predecease me, or that we shall die by the same accident, and in the event also that RICHARD ROE shall not survive me, then I give, devise and bequeath my entire residuary estate as aforesaid to my brother, HARRY DOE, of the city of _____, State of _____.

Fourth: I hereby nominate and appoint my wife, KATE DOE, to be executrix of this, my Will, and I direct that she be permitted to qualify as such without the giving of a bond or other security, in any jurisdiction. In the event that my wife, KATE DOE, shall fail to qualify, or cease to act as such executrix, then I nominate and appoint the TRUST COMPANY OF NEW YORK, or its successors, to be executor of this, my Will, it also to be permitted to act without bond or other security. I authorize said TRUST COMPANY or its successors, to sell and convey, at public or private sale, all or any of my real estate, on such terms, prices, considerations and conditions as it shall deem to be for the best interests of my estate.

In witness whereof, I have hereunto subscribed my name and affixed my seal this _____ day of _____ in the year one thousand nine hundred and _____.

Witnesses: JOHN DOE (Seal)

JOHN JONES

HENRY SMITH

CHARLES GREEN.

The foregoing instrument was subscribed by the abovenamed testator, JOHN DOE, at the city of _____, county of _____, state of _____ on this _____ day of _____, in the year one thousand nine hundred and _____, in our presence, and was at the same time and place published and declared

by him to us to be his Last Will and Testament, and thereupon we, at his request, and in his presence, and in the presence of each other, did subscribe our names thereto as attesting witnesses, this attestation clause having first been read aloud to us in the presence of said testator.

Names

JOHN JONES

HENRY SMITH

CHARLES GREEN

Residences

No. _____ Street, (City),
(State)

No. _____ Street, (City),
(State)

No. _____ Street, (City),
(State)

Codicil

I, JOHN DOE, of the city of _____, county of _____, state of _____, having made my Last Will and Testament bearing date the _____ day of _____, in the year one thousand nine hundred and _____, do now make and publish this Codicil thereto which is to be taken as an addition to and a part of my Last Will and Testament.

First: I revoke the legacy of One Thousand Dollars (\$1,000.) to my son, JAMES DOE, and give him in lieu thereof, 100 shares of common stock in the A-B-C Corporation, now in my safe deposit vault in the Trust Company in New York.

Second: I hereby give, devise and bequeath One Thousand Dollars. (\$1,000.) to the Salvation Army.

And I hereby ratify and confirm my Last Will and Testament in every respect save so far as any part of the same is inconsistent with this Codicil.

In witness whereof at the end of this Codicil to my Last Will and Testament I have subscribed my name and affixed my seal this _____ day of _____

_____, one thousand nine hundred
and _____.

JOHN DOE (Seal)

Subscribed by the above mentioned
testator in the presence of each of
us and at the same time declared by
him to be a Codicil to his Last Will
and Testament, and thereupon we, at
his request, and in his presence, and

in the presence of each other, signed
our names as subscribing witnesses.

Witnesses:

JOHN SMITH
CHARLES BROWN

No. _____ Street, (City),
(State)

No. _____ Street, (City),
(State)

LITERATURE AND LANGUAGE

GREAT WRITERS AND THEIR MASTER WORKS

Greek

Aeschylus (525-456 B.C.). Dramatist. *Prometheus Bound, Agamemnon*.

Aristophanes (c. 450-c. 385 B.C.). Dramatist. *The Birds, The Frogs, Lysistrata*.

Aristotle (384-322 B.C.). Philosopher. *Politics, Metaphysics, Poetics, Ethics*.

Euripides (480-406 B.C.). Dramatist. *Medea, The Bacchae, The Trojan Women, Hippolytus*.

Herodotus (c. 484-c. 424 B.C.). Historian. *History of the Persian Invasion of Greece*.

Hesiod (c. 735 B.C.). Poet. *Work and Days, Theogony*.

Homer (c. 900 B.C.). Epic poet. *Iliad, Odyssey*.

Pindar (522-443 B.C.). Lyric poet.

Plato (427-347 B.C.). Philosopher. *The Republic, Symposium*.

Sappho (c. 600 B.C.). Lyric poetess.

Sophocles (496-406 B.C.). Dramatist. *Oedipus the King, Antigone, Electra*.

Theocritus (Third century B.C.). Pastoral poet.

Thucydides (c. 471-c. 401 B.C.). Historian. *History of the Peloponnesian War*.

Xenophon (c. 430-c. 357 B.C.). Historian. *Anabasis*.

Latin

Caesar, Julius (100-44 B.C.). Historian. *The Gallic War*.

Catullus (87?-54 B.C.). Poet.

Cicero, Marcus Tullius (106-43 B.C.). Orator. *Against Catiline, Philippics*.

Horace (65-8 B.C.). Poet, critic. *Epistles, Odes*.

Livy (59 B.C.-17 A.D.). Historian. *History of Rome*.

Lucretius (c. 96-55 B.C.). Poet. *On the Nature of Things*.

Ovid (43 B.C.-c. 17 A.D.). Poet. *Metamorphoses, The Art of Love*.

Petronius Arbiter (died c. 66 A.D.). Satirist.

Plautus (d. 184 B.C.). Writer of comedies. *Menaechmi, Amphitruo*.

Seneca (c. 4 B.C.-65 A.D.). Philosopher, dramatist.

Terence (c. 185-c. 159 B.C.). Writer of comedies.

Virgil (70-19 B.C.). Poet. *Aeneid, Georgics*.

Italian

Ariosto, Ludovico (1474-1533). Poet. *Orlando Furioso*.

Boccaccio, Giovanni (1313-1375). Novelist and poet. *Decameron*.

Cellini, Benvenuto (1500-1571). Sculptor. *Autobiography*.

Croce, Benedetto (1866-). Philosopher and critic. *Philosophy of the Spirit, Historical Materialism*.

D'Annunzio, Gabriele (1863-1938). Novelist, poet, dramatist.

Dante Alighieri (1265-1321). Poet. *The Divine Comedy*.

Deledda, Grazia (1875-1936). Novelist. *After the Divorcee, The Mother.*

Goldoni, Carlo (1707-93). Dramatist. *The Mistress of the Inn, The Good-Humored Ladies.*

Leopardi, Giacomo (1798-1837). Poet.

Machiavelli, Niccolò (1469-1527). Political writer. *The Prince, On the Art of War.*

Manzoni, Alessandro (1785-1873). Novelist. *The Betrothed.*

Pareto, Vilfredo (1848-1923). Economist and sociologist.

Petrarch, Francesco (1304-1374). Lyric poet.

Pirandello, Luigi (1867-1936). Dramatist and novelist. *Six Characters in Search of an Author, Right You Are If You Think You Are, The Late Mattia Pascal.*

Savonarola, Girolamo (1452-1498). Poet and religious and political writer.

Svevo, Italo (1864-1928). Novelist. *Zeno's Conscience.*

Tasso, Torquato (1544-95). Poet. *Jerusalem Delivered, Aminta.*

French

Aragon, Louis (1897-). Poet and novelist. *Residential Quarter.*

Balzac, Honoré de (1799-1850). Novelist. *Eugénie Grandet, Père Goriot.*

Barbusse, Henri (1871-1935). Novelist. *Under Fire.*

Baudelaire, Charles (1821-67). Lyric poet. *Flowers of Evil.*

Baumarchais, Pierre Augustin Caron de (1732-99). Dramatist. *The Barber of Seville, The Marriage of Figaro.*

Bellay, Joachim du (1524-60). Poet and critic.

Bergson, Henri (1859-1941). Philosopher. *Creative Evolution.*

Bernardin de St. Pierre, Jacques Henri (1737-1814). Novelist. *Paul and Virginia.*

Boileau-Despréaux, Nicolas (1636-1711). Critic and poet. *The Art of Poetry.*

Brieux, Eugène (1858-1932). Dramatist. *Damaged Goods.*

Calvin, John (1509-64). Theologist. *Institutes of the Christian Religion.*

Chateaubriand, François de (1768-1848). Novelist. *René, Atala.*

Corneille, Pierre (1606-84). Dramatist. *The Cid.*

Daudet, Alphonse (1840-97). Novelist. *Le Petit Chose, Tartarin de Tarascon, Sapho.*

Descartes, René (1596-1650). Mathematician and philosopher. *Discourse on Method.*

Diderot, Denis (1713-84). Philosopher and critic. Edited the *Encyclopedia.*

Duhamel, Georges (1884-). Novelist. *The Pasquier Chronicle.*

Dumas fils, Alexander (1824-95). Dramatist and novelist. *La Dame aux Camélias (Camille).*

Dumas père, Alexander (1802-70). Novelist and dramatist. *The Three Musketeers, The Count of Monte Cristo.*

Flaubert, Gustave (1821-80). Novelist. *Mme. Bovary, Education Sentimentale.*

Fontaine, Jean de la (1621-95). Poet and fabulist.

France, Anatole (Jacques Anatole Thibault) (1844-1924). Novelist, critic, satirist. *Thais, Crainquebille, The Gods Are Athirst, Penguin Isle.*

Froissart, Jean (c. 1337-1410). Historian. *Chronicles.*

Gautier, Théophile (1811-72). Novelist and poet. *Mlle. de Maupin.*

Gide, André (1869-). Novelist. *The Counterfeiters.*

Goncourt, Edmond de (1822-96) and Jules de (1830-70). Novelists. *Germinie Lacerteux, Renée Mauperin.*

Hugo, Victor (1802-85). Novelist, dramatist, and poet. *Les Misérables, Notre Dame de Paris, Hernani.*

Lafayette, Maria, Countess de (1634-93). Novelist. *The Princess of Clèves*.

Lamartine, Alphonse de (1790-1869). Lyric poet.

La Rochefoucauld, François de (1613-80). Moralist and memoir-writer.

Le Sage, Alain René (1668-1747). Novelist. *Gil Blas*.

Loti, Pierre (Louis Marie Julien Viaud) (1850-1923). *The Iceland Fisherman*.

Maeterlinck, Maurice (1862-). Belgian poet and dramatist. *Pelléas and Mélisande*, *The Blue Bird*.

Mallarmé, Stéphane (1842-98). Lyric poet.

Malraux, André (1895-). Novelist. *Man's Fate*. *Man's Hope*.

Martin du Gard, Roger (1881-). Novelist. *The Thibaults*.

Maupassant, Guy de (1850-93). Short story writer and novelist. *Une Vie*, *Pierre and Jean*.

Mistral, Frédéric (1830-1914). Provençal poet.

Molière, Jean Baptiste (Poquelin) (1622-73). Dramatist. *Tartuffe*, *The Misanthrope*, *The Affected Ladies*, *The Doctor in Spite of Himself*.

Montaigne, Michel de (1533-92). Philosopher and essayist.

Montesquieu (1689-1755). Political theorist. *The Spirit of Laws*.

Musset, Alfred de (1810-57). Lyric poet.

Pascal, Blaise (1623-62). Philosopher and scientist. *Pensées*.

Prévost, Abbé (1697-1763). Novelist. *Manon Lescaut*.

Proust, Marcel (1871-1922). Novelist. *Remembrance of Things Past*.

Rabelais, François (c. 1494-1553). Satirist. *Gargantua and Pantagruel*.

Racine, Jean Baptiste (1639-99). Dramatist. *Phèdre*, *Andromaque*.

Rimbaud, Jean Arthur (1854-91). Lyric poet.

Rolland, Romain (1866-1945).

Novelist and musicologist. *Jean Christophe*, *Beethoven*.

Romains, Jules (Louis Farigoule) (1885-). Dramatist and novelist. *Dr. Knock*, *Men of Good Will*.

Ronsard, Pierre de (1524-85). Lyric poet.

Rostand, Edmond (1868-1918). Dramatist. *Cyrano de Bergerac*.

Rousseau, Jean Jacques (1712-78). Philosopher. *Emile*, *La Nouvelle Héloïse*, *Social Contract*, *Confessions*.

Sand, Georges (Baroness Dudevant) (1804-76). Novelist. *Indiana*, *Consuelo*.

Scudéry, Madeleine de (1607-1701). Novelist. *Clélie*.

Sévigné, Marie de Rabutin-Chantal, Marquise de (1626-96). Writer of letters.

Staël, Madame de (1766-1817). Novelist and critic. *Corinne*.

Stendhal (Marie Henri Beyle) (1783-1842). Novelist. *The Red and the Black*, *The Charterhouse of Parma*.

Sue, Eugene (1804-57). Novelist. *The Wandering Jew*.

Sully-Prudhomme, René (1839-1907). Lyric poet.

Taine, Hippolyte (1828-93). Critic and historian. *History of English Literature*.

Tocqueville, Alexis de (1805-59). Political writer. *Democracy in America*.

Valéry, Paul (1871-). Poet and philosopher. *Variety*.

Verlaine, Paul (1844-96). Lyric poet.

Verne, Jules (1828-1905). Novelist. *Twenty Thousand Leagues under the Sea*, *Around the World in Eighty Days*.

Vigny, Alfred de (1799-1863). Lyric poet.

Villon, François (1431-63?). Lyric poet.

Voltaire (François Marie Arouet) (1694-1778). Philosopher. *Candide*.

Zola, Emile (1840-1902). Novelist. *Thérèse Raquin*, *Germinal*, *The Débacle*.

German, Dutch, and Scandi- navian

(Unless otherwise noted, these writers are German.)

Andersen, Hans Christian (1805-75). Danish writer of fairy tales.

Andersen-Nexö, Martin (1869-). Danish novelist. *Pelle the Conqueror*.

Björnson, Björnstjerne (1832-1910). Danish novelist and dramatist. *The Fishermiden, The Bankrupt*.

Boehme, Jakob (1575-1624). Philosopher. *Aurora*.

Bojer, Johan (1872-). Norwegian novelist. *The Great Hunger*.

Brandes, Georg (1842-1927). Danish critic. *Main Currents of Nineteenth Century Literature*.

Chamisso, Adelbert von (1781-1838). Poet and novelist. *Peter Schlemihl*.

Couperus, Louis (1863-1923). Dutch novelist. *Book of Small Souls*.

Erasmus, Desiderius (1465?-1536). Scholar and satirist. *Colloquies, In Praise of Folly*.

Eschenbach, Wolfram von (c. 1170-1220). Epic poet. *Parzifal*.

Feuchtwanger, Lion (1884-). Novelist. *Power, Success*.

Fichte, Johann Gottlieb (1762-1814). Philosopher. *The Science of Knowledge*.

George, Stefan (1868-1933). Poet.

Gessner, Salomon (1730-88). Swiss poet. *Abel's Death*.

Goethe, Johann Wolfgang von (1749-1832). Poet, dramatist, and novelist. *Faust, Hermann and Dorothea, Wilhelm Meister's Apprenticeship*.

Grillparzer, Franz (1791-1872). Novelist and dramatist. *The Poor Fiddler*.

Grimm, Jakob (1785-1863) and Wilhelm (1786-1859). Writers of fairy tales.

Grimmelshausen, Christoffel von (1624?-76). Novelist. *The Adventure-some Simplicissimus*.

Grotius, Hugo (1583-1645). Dutch jurist, theologian, and poet. *The Laws of War and Peace*.

Hamsun, Knut (1859-). Norwegian novelist. *Growth of the Soil*.

Hauptmann, Gerhart (1862-). Dramatist. *The Weavers, The Sunken Bell*.

Hegel, Georg Wilhelm Friedrich (1770-1831). Philosopher. *Philosophy of History*.

Heine, Heinrich (1797-1856). Lyric poet.

Herder, Johann Gottfried von (1744-1803). Philosopher, poet, and critic. *Ideas on the History of Mankind*.

Heyse, Paul (1830-1914). Novelist and poet. *L'Arrabiata*.

Hoffman, Ernst Theodor Amadeus (1776-1822). Novelist. *The Devil's Elixir*.

Ibsen, Henrik (1828-1906). Norwegian dramatist. *Doll's House, Ghosts, Hedda Gabler*.

Kafka, Franz (1883-1924). Novelist. *The Trial, The Castle*.

Kant, Immanuel (1724-1804). Philosopher. *The Critique of Pure Reason*.

Keller, Gottfried (1819-90). Swiss novelist. *Green Henry*.

Kleist, Heinrich von (1777-1811). Poet and dramatist. *Michael Kohlhaas*.

Klopstock, Friedrich Gottlieb (1724-1803). Poet. *The Messiah*.

Lagerlöf, Selma (1858-1941). Swedish novelist. *Gösta Berling*.

Lenau, Nikolaus (1802-50). Lyric poet.

Lessing, Gotthold Ephraim (1729-81). Dramatist and critic. *Minna von Barnhelm, Nathan the Wise, Laökoon*.

Luther, Martin (1483-1546). Religious leader, hymnist, translator of the Bible.

Mann, Thomas (1875-). Novelist. *Buddenbrooks, The Magic Mountain, Joseph*.

Marx, Karl (1818-83). Political theorist. *The Communist Manifesto*, *Capital*.

Mommsen, Theodor (1817-1903). Historian. *Roman History*.

Nietzsche, Friedrich Wilhelm (1844-1900). Philosopher. *Beyond Good and Evil*.

Novalis (Friedrich von Hardenberg) (1772-1801). Poet and novelist. *Heinrich von Ofterdingen*.

Remarque, Erich Maria (1897-). Novelist. *All Quiet on the Western Front*.

Richter, Jean Paul Friedrich (1763-1825). Novelist. *Quintus Fixlein*.

Rilke, Rainer Maria (1875-1926). Poet.

Sachs, Hans (1494-1576). Poet and mastersinger.

Schiller, Friedrich von (1759-1805). Poet, dramatist, historian. *William Tell*, *The Maid of Orleans*, *Marie Stuart*.

Schlegel, August Wilhelm (1767-1845). Poet and scholar.

Schlegel, Friedrich von (1772-1829). Philosopher, novelist, and critic. *Lucinde*.

Schnitzler, Arthur (1862-1931). Dramatist and novelist. *Anatol*.

Schopenhauer, Arthur (1788-1860). Philosopher. *The World As Will and Idea*.

Spengler, Oswald (1880-1936). Philosopher. *The Decline in the West*.

Spielhagen, Friedrich (1829-1911). Novelist. *Hammer and Anvil*.

Storm, Theodor (1817-88). Poet and novelist. *Immensee*.

Strassburg, Gottfried von (c. 1200). Poet. *Tristan and Isolde*.

Sudermann, Hermann (1857-1928). Novelist and dramatist. *Dame Care*.

Tieck, Ludwig (1773-1853). Novelist. *Puss in Boots*.

Uhland, Johann Ludwig (1787-1862). Poet.

Undset, Sigrid (1882-). Norwegian novelist. *Kristin Lavransdatter*.

Walther von der Vogelweide (died after 1227). Poet and minnesinger. *Maxims*.

Wassermann, Jakob (1873-1934). Austrian novelist. *The World's Illusion*.

Wedekind, Franz (1864-1918). Dramatist. *Spring's Awakening*.

Werfel, Franz (1890-1945). Novelist and dramatist. *The Forty Days of Musa Dagh*, *Goat Song*.

Wieland, Christoph Martin (1733-1813). Poet. *Oberon*, *Agathan*.

Zweig, Arnold (1887-). Novelist. *The Case of Sergeant Grischa*.

Zweig, Stefan (1881-1942). Poet, novelist, biographer. *Conflicts*, *Marie Antoinette*.

English

Addison, Joseph (1672-1719). Essayist. *Tatler* and *Spectator* papers.

Arnold, Matthew (1822-88). Poet and essayist. *Culture and Anarchy*, *Literature and Dogma*.

Auden, Wystan Hugh (1907-). Poet.

Austen, Jane (1775-1817). Novelist. *Pride and Prejudice*, *Sense and Sensibility*.

Bacon, Francis (1561-1626). Philosopher and essayist. *The Advancement of Learning*, *Novum Organum*.

Barrie, James M. (1860-1937). Dramatist and novelist. *The Admirable Crichton*, *What Every Woman Knows*, *Peter Pan*, *The Little Minister*.

Beaumont, Francis (1584-1616) and Fletcher, John (1579-1625). Dramatists. *The Maid's Tragedy*, *The Knight of the Burning Pestle*.

Bede, The Venerable (673-735). Historian. *Ecclesiastical History*.

Bennett, Arnold (1867-1931). Novelist. *Old Wives' Tale*, *Clayhanger*.

Blake, William (1757-1827). Lyric poet.

Brontë, Charlotte (1816-55). Novelist. *Jane Eyre*.

Brontë, Emily (1818-48). Novelist. *Wuthering Heights*.

Browne, Sir Thomas (1605-82). Physician and prose writer. *Religio Medici*, *Hydriotaphia*.

Browning, Elizabeth Barrett (1806-61). Poet.

Browning, Robert (1812-89). Poet. *The Ring and the Book*.

Bunyan, John (1628-88). Prose writer. *Pilgrim's Progress*.

Burns, Robert (1759-96). Lyric poet.

Byron, George Gordon, Lord (1788-1824). Poet. *Childe Harold*, *Don Juan*.

Carlyle, Thomas (1795-1881). Essayist and historian. *Sartor Resartus*, *Past and Present*, *The French Revolution*.

Carroll, Lewis (Charles L. Dodgson) (1832-98). Prose writer. *Alice in Wonderland*.

Chaucer, Geoffrey (1340-1400). Poet. *Canterbury Tales*.

Chesterton, Gilbert Keith (1874-1936). Essayist and novelist. *The Man Who Was Thursday*.

Coleridge, Samuel Taylor (1772-1834). Poet and critic. *The Ancient Mariner*, *Biographia Literaria*.

Congreve, William (1670-1729). Dramatist. *Love for Love*, *The Way of the World*.

Conrad, Joseph (Teodor Jozef Konrad Korzeniowski) (1857-1924). Novelist. *Lord Jim*, *Typhoon*.

Coward, Noel (1899-). Dramatist. *Private Lives*, *Design for Living*.

Darwin, Charles (1809-82). Scientist. *The Origin of the Species*.

Defoe, Daniel (1661-1731). Novelist. *Robinson Crusoe*, *Moll Flanders*.

Dekker, Thomas (c. 1570-1641). Dramatist. *The Shoemaker's Holiday*.

Dickens, Charles (1811-63). Novelist. *Pickwick Papers*, *Oliver Twist*, *David Copperfield*, *Martin Chuzzlewit*, *A Tale of Two Cities*.

Donne, John (1573-1631). Lyric poet.

Doyle, Arthur Conan (1859-1930).

Novelist. *The Adventures of Sherlock Holmes*.

Dryden, John (1631-1700). Poet, dramatist, and critic. *Absalom and Achitophel*, *MacFlecknoe*.

Eliot, George (Mary Ann Evans) (1819-80). Novelist. *Adam Bede*, *Silas Marner*, *Middlemarch*.

Fielding, Henry (1707-54). Novelist. *Tom Jones*.

Forster, Edward Morgan (1879-). Novelist. *Passage to India*.

Galsworthy, John (1867-1933). Novelist and dramatist. *The Forsyte Saga*, *Strife*, *Justice*.

Geoffrey of Monmouth (1100-1154). Historian. *History of English Kings*.

Gibbon, Edward (1737-94). Historian. *Decline and Fall of the Roman Empire*.

Gissing, George (1857-1903). Novelist. *New Grub Street*.

Goldsmith, Oliver (1728-74). Novelist, poet, and dramatist. *The Vicar of Wakefield*, *She Stoops to Conquer*.

Gower, John (c. 1325-1408). Poet. *Confessio Amantis*.

Gray, Thomas (1716-71). Poet.

Hardy, Thomas (1840-1928). Novelist and poet. *Jude the Obscure*, *The Return of the Native*.

Herrick, Robert (1591-1674). Lyric poet.

Housman, Alfred Edward (1859-1936). Poet. *A Shropshire Lad*.

Huxley, Aldous (1894-). Novelist. *Point Counterpoint*, *Brave New World*.

Johnson, Samuel (1709-84). Essayist and lexicographer. *The Rambler*, *Lives of the Poets*, *Rasselas*, *Dictionary*.

Jonson, Ben (1573-1637). Dramatist and poet. *Every Man in His Humour*, *Volpone*.

Joyce, James (1882-1941). Novelist. *Portrait of the Artist As a Young Man*, *Ulysses*, *Finnegan's Wake*.

Keats, John (1795-1821). Lyric poet.

Kipling, Rudyard (1865-1936). Poet and novelist. *Kim*, *The Light That Failed*, *The Jungle Book*.

Lamb, Charles (1775-1834). Essayist. *Essays of Elia*, *Tales from Shakespeare*.

Langland, William (c. 1330-c. 1400). Poet. *The Vision of Piers Plowman*.

Lawrence, David Herbert (1885-1930). Novelist. *Sons and Lovers*, *Lady Chatterley's Lover*.

Locke, John (1632-1704). Philosopher. *Essay Concerning Human Understanding*.

Lyly, John (1554-1606). Writer of prose narratives. *Euphues*.

Macauley, Thomas Babington (1800-59). Essayist and poet. *Lays of Ancient Rome*.

Malory, Thomas (c. 1430-c. 1470). Writer of prose narratives. *Morte d'Arthur*.

Mansfield, Katherine (1890-1923). Writer of short stories.

Marlowe, Christopher (1564-93). Dramatist and poet. *Dr. Faustus*, *Tamburlaine*, *The Jew of Malta*, *Hero and Leander*.

Masefield, John (1875-). Poet. *The Everlasting Mercy*, *The Widow in the Bye Street*.

Maugham, William Somerset (1874-). Novelist and dramatist. *Of Human Bondage*, *The Moon and Sixpence*, *The Circle*.

Mercedith, George (1828-1919). Novelist and poet. *Diana of the Crossways*, *The Ordeal of Richard Feverel*, *The Egoist*.

Mill, John Stuart (1806-73). Essayist. *On Liberty*, *Autobiography*.

Milton, John (1608-74). Poet and pamphleteer. *Paradise Lost*, *Lycidas*, *Areopagitica*.

Moore, George (1852-1933). Novelist. *Esther Waters*, *The Brook Kerith*.

Morc, Sir Thomas (1478-1535). Statesman. *Utopia*.

Morris, William (1834-96). Poet and essayist. *News from Nowhere*.

Newman, John Henry, Cardinal (1801-90). Essayist. *The Idea of a University*, *Apologia pro Vita Sua*.

O'Casey, Sean (1884-). Dramatist. *The Plough and the Stars*, *Juno and the Paycock*.

Pepys, Samuel (1633-1703). Diarist.

Pinero, Arthur Wing (1855-1934). Dramatist. *The Second Mrs. Tanqueray*.

Pope, Alexander (1688-1744). Poet. *Essay on Criticism*, *Rape of the Lock*, *Essay on Man*.

Quincey, Thomas de (1785-1859). Essayist. *Confessions of an Opium Eater*.

Richardson, Samuel (1689-1761). Novelist. *Pamela*, *Clarissa*.

Rossetti, Dante Gabriel (1828-82). Poet.

Ruskin, John (1819-1900). Critic and essayist. *The Stones of Venice*, *Modern Painters*, *Sesame and Lilies*.

Scott, Sir Walter (1771-1832). Novelist and poet. *Waverley*, *Ivanhoe*, *Heart of Midlothian*.

Shakespeare, William (1564-1616). Dramatist and poet. *Romeo and Juliet*, *Midsummer Night's Dream*, *Hamlet*, *Macbeth*, *Othello*, *King Lear*, *Julius Caesar*, *Much Ado about Nothing*, *Twelfth Night*, *As You Like It*, *Henry IV*, *The Tempest*.

Shaw, George Bernard (1856-). Dramatist. *Candida*, *Man and Superman*, *St. Joan*, *Back to Methuselah*.

Shelley, Percy Bysshe (1792-1822). Lyric poet.

Sheridan, Richard Brinsley (1751-1816). Playwright. *The Rivals*, *The School for Scandal*.

Sidney, Sir Philip (1554-86). Poet. *Arcadia*.

Smollett, Tobias George (1721-71). Novelist. *Humphrey Clinker*.

Spenser, Edmund (1552-99). Poet. *The Faerie Queene*, *The Shepherd's Calendar*.

Steele, Richard (1672-1729). Essayist. *Tatler* and *Spectator* papers.

Sterne, Laurence (1713-68). Novelist. *Tristram Shandy*.

Stevenson, Robert Louis (1850-94). Novelist. *Treasure Island*.

Swift, Jonathan (1667-1745). Satirist. *Gulliver's Travels*, *The Tale of a Tub*.

Swinburne, Algernon Charles (1837-1909). Poet.

Synge, John Millington (1871-1909). Dramatist. *Riders to the Sea*, *The Playboy of the Western World*.

Tennyson, Alfred (1809-92). Poet. *In Memoriam*, *Idyls of the King*.

Thackeray, William Makepeace (1811-63). Novelist. *Vanity Fair*, *Henry Esmond*.

Wells, Herbert George (1866-). Novelist, sociologist, and historian. *The Outline of History*, *Tono Bungay*, *Experiment in Autobiography*.

Wilde, Oscar (1856-1900). Poet, dramatist, and novelist. *The Ballad of Reading Gaol*, *The Importance of Being Earnest*, *The Picture of Dorian Gray*.

Woolf, Virginia (1882-1941). Novelist. *Mrs. Dalloway*, *To the Lighthouse*.

Wordsworth, William (1770-1850). Poet.

Wycherly, William (1640-1715). Dramatist. *The Country Wife*, *The Plain Dealer*.

Yeats, William (1865-1939). Poet and dramatist. *Kathleen ni Houlihan*, *Land of Heart's Desire*, *The Countess Cathleen*, *Deirdre*.

American

Adams, Henry (1838-1919). Historian. *The Education of Henry Adams*.

Alcott, Louisa May (1832-88). Novelist. *Little Women*.

Anderson, Maxwell (1888-). Dramatist. *Elizabeth the Queen*, *Winterset*.

Anderson, Sherwood (1876-1941). Short story writer and novelist. *Winesburg, Ohio*, *The Triumph of the Egg*.

Beard, Charles Austin (1874-). Historian. *The Rise of American Civilization*.

Behrman, S. N. (1893-). Dramatist. *Biography*.

Benét, Stephen Vincent (1898-1943). Poet and short story writer. *John Brown's Body*.

Brooks, Van Wyck (1886-). Critic and historian. *The Ordeal of Mark Twain*, *The Flowering of New England*.

Bryant, William Cullen (1794-1878). Poet. "Thanatopsis."

Buck, Pearl (1892-). Novelist. *The Good Earth*.

Cabell, James Branch (1879-). Novelist. *Jurgen*.

Cather, Willa (1876-). Novelist. *O Pioneers*, *Song of the Lark*, *My Antonia*, *Death Comes to the Archbishop*.

Clemens, Samuel Langhorne (Mark Twain) (1835-1910). Novelist, short story writer, and humorist. *Tom Sawyer*, *Huckleberry Finn*, *Innocents Abroad*, *The Gilded Age*, *The Mysterious Stranger*.

Cooper, James Fenimore (1789-1851). Novelist. *The Spy*, *Deerslayer*, *The Last of the Mohicans*.

Crane, Stephen (1871-1900). Novelist. *The Red Badge of Courage*.

Dickinson, Emily (1830-86). Poet.

Dos Passos, John (1896-). Novelist. *Three Soldiers*, *U.S.A.*

Dreiser, Theodore (1871-). Novelist. *Sister Carrie*, *Jennie Gerhardt*, *An American Tragedy*.

Dunbar, Paul Laurence (1872-1906). Poet.

Edwards, Jonathan (1703-58). Theologian. *An Essay on the Freedom of the Will*.

Eliot, T. S. (1888-). Poet and critic. *The Waste Land*, *Murder in the Cathedral*.

- Emerson, Ralph Waldo (1803-82). Essayist and poet. *Representative Men*, *The American Scholar*, *Journals*.
- Farrell, James T. (1904-). Novelist. *Studs Lonigan*.
- Franklin, Benjamin (1706-90). Statesman. *Poor Richard's Almanac*, *Autobiography*.
- Freneau, Philip (1752-1832). Poet.
- Frost, Robert (1875-). Poet. "Mending Wall," "Birches," "The Death of the Hired Man."
- Garland, Hamlin (1860-1940). Short story writer. *Main-Travelled Roads*, *Son of the Middle Border*.
- Harte, Francis Bret (1839-1902). Short story writer and poet. "The Luck of Roaring Camp."
- Hawthorne, Nathaniel (1804-64). Novelist and writer of short stories. *The Scarlet Letter*, *The House of Seven Gables*.
- Hellman, Lillian (1905-). Dramatist. *The Children's Hour*, *The Little Foxes*, *Watch on the Rhine*.
- Hemingway, Ernest (1898-). Novelist and short story writer. *A Farewell to Arms*, *The Sun Also Rises*, *For Whom the Bell Tolls*.
- Henry, O. (William Sidney Porter) (1862-1910). Short story writer.
- Holmes, Oliver Wendell (1809-94). Poet and essayist. *The Autocrat of the Breakfast Table*.
- Howells, William Dean (1837-1920). Novelist and critic. *The Rise of Silas Lapham*.
- Irving, Washington (1783-1859). Prose writer. *Knickerbocker's History of New York*, *Sketch Book*.
- James, Henry (1843-1916). Novelist. *The Portrait of a Lady*, *The Golden Bowl*.
- Jeffers, Robinson (1887-). Poet. *Thurso's Landing*, *Tamar*.
- Lewis, Sinclair (1885-). Novelist. *Main Street*, *Babbitt*, *Arrowsmith*, *It Can't Happen Here*.
- Lindsay, Vachel (1879-1931). Poet. "The Congo."
- London, Jack (1876-1916). Novelist. *Call of the Wild*, *The Iron Heel*.
- Longfellow, Henry Wadsworth (1807-82). Poet. *Evangeline*, *Hia-watha*, translation of *The Divine Comedy*.
- Lowell, Amy (1874-1925). Poet and critic.
- Lowell, James Russell (1819-91). Poet. "The Vision of Sir Launfal," "Fable for Critics."
- Markham, Edwin (1852-1940). Poet. "The Man with the Hoe."
- Masters, Edgar Lee (1868-). Poet. *Spoon River Anthology*.
- Mather, Cotton (1663-1728). Theologian and historian. *New England Church History*.
- Melville, Herman (1819-91). Novelist. *Moby Dick*.
- Mencken, Henry Louis (1880-). Essayist and philologist. *The American Language*.
- Millay, Edna St. Vincent (1892-). Poet. "Renaissance," "Ballad of the Harp Weaver," *Fatal Interview*.
- Norris, Frank (1870-1902). Novelist. *The Octopus*, *McTeague*.
- Odets, Clifford (1906-). Dramatist. *Waiting for Lefty*, *Awake and Sing*, *Golden Boy*.
- O'Neill, Eugene (1888-). Dramatist. *Strange Interlude*, *Mourning Becomes Electra*, *The Emperor Jones*, *Desire under the Elms*, *Ah! Wilderness*.
- Paine, Thomas (1737-1809). Pamphleteer. *The Crisis*, *Common Sense*, *The Rights of Man*.
- Parrington, Vernon Louis (1871-1929). Critic. *Main Currents of American Thought*.
- Poe, Edgar Allan (1809-49). Poet and writer of short stories. "The Gold Bug," "The Fall of the House of Usher."
- Robinson, Edwin Arlington (1869-1935). Poet. "The Man against the Sky," *Tristram*.
- Sandburg, Carl (1878-). Poet and biographer. "Chicago," "Grass,"

"Fog," *The People Yes*, Abraham Lincoln.

Santayana, George (1863-). Philosopher and novelist. *The Life of Reason*, *The Last Puritan*.

Sherwood, Robert (1896-). Dramatist. *The Petrified Forest*, *Abraham Lincoln in Illinois*.

Sinclair, Upton (1878-). Novelist. *The Jungle*, *Dragon's Teeth*.

Steinbeck, John (1902-). Novelist and dramatist. *The Grapes of Wrath*, *Of Mice and Men*, *Tortilla Flat*.

Stowe, Harriet Beecher (1811-96). Novelist. *Uncle Tom's Cabin*.

Tarkington, Booth (1869-). Novelist. *Penrod and Sam*.

Thoreau, Henry David (1817-62). Essayist. *Walden*.

Wharton, Edith (1862-1937). Novelist. *The Age of Innocence*, *Ethan Frome*.

Whitman, Walt (1819-92). Poet. *Leaves of Grass*.

Whittier, John Greenleaf (1807-92). Poet. "Snow Bound," "Maud Muller."

Wigglesworth, Michael (1631-1705). Poet. *The Day of Doom*.

Wilder, Thornton (1897-). Novelist and dramatist. *The Bridge of San Luis Rey*, *Our Town*.

Wolfe, Thomas (1900-1938). Novelist. *Look Homeward Angel*, *You Can't Go Home Again*.

Wright, Richard (1908-). Novelist and short story writer. *Native Son*.

Russian

Andreyev, Leonid (1871-1919). Novelist and dramatist. *The Seven Who Were Hanged*, *He Who Gets Slapped*.

Artzybashev, Mikhail (1878-1927). Novelist and dramatist. *Sanine*.

Bunin, Ivan (1870-). Novelist. *Sukhodel*, *The Gentleman from San Francisco*.

Chekhov, Anton (1860-1904).

Dramatist and short story writer. *The Cherry Orchard*, *The Sea Gull*, *The Three Sisters*.

Dostoyevsky, Feodor (1821-81). Novelist. *Crime and Punishment*, *The Brothers Karamazov*.

Gogol, Nikolai (1809-52). Novelist and dramatist. *Dead Souls*, *The Inspector General*.

Gorki, Maxim (Alexei Maximovich Peshkov) (1868-1936). Novelist and dramatist. *Mother*, *The Lower Depths*.

Griboyedov, Alexander (1795-1829). Dramatist. *The Misfortune of Being Clever*.

Hertzen, Alexander (1812-70). Political writer. *Who Is To Blame?*

Krylov, Ivan (1768-1844). Fabulist.

Lermontov, Mikhail (1814-41). Poet and novelist. *The Demon*.

Lomonosov, Mikhail (1711-65). Lyric poet.

Merczhkovsky, Dmitri (1866-). Novelist and critic. *The Romance of Leonardo da Vinci*.

Nekrasov, Nikolai (1821-77). Poet.

Ostrovsky, Alexander (1823-86). Dramatist. *The Storm*, *The Snow-Maiden*.

Pushkin, Alexander (1799-1837). Poet, dramatist, writer of prose narratives. *Eugen Onegin*, *The Fountain of the Baghehisaray*, *Poltava*, *Boris Godunov*, *The Queen of Spades*, *The Golden Cockerel*.

Saltykov, Mikhail (1826-89). Novelist. *The Golovynov Family*.

Sholokhov, Mikhail (1905-). Novelist. *The Quiet Don*.

Tolstoi, Aleksei (1882-1945). Novelist and dramatist. *Peter the Great*.

Tolstoy, Leo (1828-1910). Novelist. *War and Peace*, *Anna Karenina*.

Turgenev, Ivan (1818-83). Novelist. *Fathers and Sons*.

Spanish

Alarcon, Pedro de (1833-91). Novelist. *The Three-Cornered Hat*.

Alvarez Quintero, Serafin (1871-) and Joaquín (1873-). Dramatists. *Cradle Song*.

Antonio de Solís (1610-86). Historian and poet. *History of the Conquest of Mexico*.

Baroja y Nessi, Pio (1872-). Novelist. *The Struggle for Existence*.

Becquer, Gustavo Adolfo (1836-70). Poet and writer of short stories.

Benavente, Jacinto (1866-). Dramatist. *The Bonds of Interest*, *The Passion Flower*, *Saturday Night*.

Blasco Ibañez, Vicente (1867-1928). Novelist. *The Four Horsemen of the Apocalypse*.

Calderon de la Barca (1600-81). Dramatist. *Life Is a Dream*, *The Wonder-Working Magician*.

Cervantes, Miguel de (1547-1616). Novelist. *Don Quixote*.

Darío, Rubén (1867-1916). Spanish-American poet.

Echegaray, Jose (1833-1916). Dramatist. *Madman or Sanctity*, *The Great Galeoto*.

Ercilla, Alonso de (1533-95). Epic poet. *La Araucana*.

Gongore y Argote, Luis de (1561-1627). Poet.

Leon, Fray Luis Ponce de (1527-91). Religious poet.

Ortega y Gasset, Jose (1883-). Political and social writer. *The Revolt of the Masses*.

Palacio Valdes, Armando (1853-1938). Novelist. *The Fourth Estate*.

Pereda, Jose Maria de (1833-1906). Novelist. *The Taste of the Earth*.

Perez Galdos, Benito (1845-1920). Novelist and dramatist. *Doña Perfecta*.

Quevedo, Gomez de (1580-1645). Satirist and novelist. *Visions*, *The Life and Adventures of Buscon*.

Tirso de Molina (Gabriel Tellez) (1571-1648). Dramatist. *The Seducer of Seville*.

Unamuno, Miguel de (1864-). Scholar. *The Tragic Sense of Life*.

Valera, Juan (1824-1905). Novelist. *Pepita Jimenez*.

Vega, Lope de (1562-1635). Dramatist. *Punishment without Revenge*, *A Certainty for Doubt*.

Other Countries

Asch, Sholom (1880-). Yiddish novelist. *Three Cities*, *The Nazarene*.

Bialik, Chaim Nachman (1873-1934). Hebrew poet and novelist.

Camoëns, Luis de (1524-1579). Portuguese epic poet. *The Lusíads*.

Capek, Karel (1890-1927). Czechoslovakian dramatist. *R.U.R.*

Molnar, Ferenc (1875-). Hungarian dramatist. *Liliom*.

Omar Khayyam (Eleventh century). Persian poet. *The Rubaiyat*.

Sienkiewicz, Henryk (1846-1916). Polish novelist. *Quo Vadis*.

Tagore, Rabindranath (1861-1941). Hindu poet.

PRIZE WINNERS IN LITERATURE

Nobel Prize Winners

1901, René François Armand Sully Prudhomme, French; 1902, Theodor Mommsen, German; 1903, Björnsterne Björnson, Norwegian; 1904, Frédéric Mistral, French; 1904, Jose Echegaray, Spanish; 1905, Henryk Sienkiewicz, Polish; 1906, Giosue Carducci, Italian; 1907, Rudyard Kipling,

English; 1908, Rudolf Eucken, German; 1909, Selma Lagerlöf, Swedish; 1910, Paul Heyse, German;

1911, Maurice Maeterlinck, Belgian; 1912, Gerhart Hauptmann, German; 1913, Rabindranath Tagore, Bengalian; 1915, Romain Rolland, French; 1916, Verner von Heidenstam, Swedish; 1917, Karl Gjellerup, Danish; 1917, Henrik Pontoppidan,

Danish; 1919, Carl Spitteler, Swiss; 1920, Knut Hamsun, Norwegian;

1921, Anatole France, French; 1922, Jacinto Benavente, Spanish; 1923, William Butler Yeats, Irish; 1924, Wladyslaw Reymont, Polish; 1925, George Bernard Shaw, Irish; 1926, Grazia Deledda, Italian; 1927, Henri Bergson, French; 1928, Sigrid Undset, Norwegian; 1929, Thomas Mann, German; 1930, Sinclair Lewis, American;

1931, Erik Axel Karlfeldt, Swedish; 1932, John Galsworthy, English; 1933, Ivan Bunin, Russian; 1934, Luigi Pirandello, Italian; 1936, Eugene O'Neill, American; 1937, Roger Martin Du Gard, French; 1938, Pearl Buck, American; 1939, Eemil Sillanpää, Finnish; 1944, Johannes Vilhelm Jensen, Danish; 1945, Gabriela Mistral, Chilean.

Pulitzer Prize Poets

1922, Edwin Arlington Robinson; 1923, Edna St. Vincent Millay; 1924, Robert Frost; 1925, Edwin Arlington Robinson; 1926, Amy Lowell; 1927, Leonora Speyer; 1928, Edwin Arlington Robinson; 1929, Stephen Vincent Benét; 1930, Conrad Aiken; 1931, Robert Frost;

1932, George Dillon; 1933, Archibald MacLeish; 1934, Robert Hillyer; 1935, Audrey Wurdeman; 1936, Robert P. Tristram Coffin; 1937, Robert Frost; 1938, Marya Zaturenska; 1939, John Gould Fletcher; 1940, Mark Van Doren; 1941, Leonard Bacon;

1942, William Rose Benét; 1943, Robert Frost, *A Witness Tree*; 1944, Stephen Vincent Benét, "Western Star"; 1945, Karl Jay Shapiro, *V-Letter and Other Poems*.

Pulitzer Prize Novelists

1918, Ernest Poole, *His Family*; 1919, Booth Tarkington, *The Magnificent Ambersons*; 1921, Edith Wharton, *The Age of Innocence*; 1922, Booth

Tarkington, *Alice Adams*; 1923, Willa Cather, *One of Ours*; 1924, Margaret Wilson, *The Able McLaughlins*; 1925, Edna Ferber, *So Big*; 1926, Sinclair Lewis, *Arrowsmith*; 1927, Louis Bromfield, *Early Autumn*; 1928, Thornton Wilder, *The Bridge of San Luis Rey*;

1929, Julia M. Peterkin, *Scarlet Sister Mary*; 1930, Oliver La Farge, *Laughing Boy*; 1931, Margaret Ayer Barnes, *This Year of Grace*; 1932, Pearl Buck, *The Good Earth*; 1933, T. S. Stribling, *The Store*; 1934, Caroline Miller, *Lamb in His Bosom*; 1935, Josephine Johnson, *Now in November*; 1936, H. L. Davis, *Honey in the Horn*; 1937, Margaret Mitchell, *Gone with the Wind*; 1938, J. P. Marquand, *The Late George Apley*;

1939, Marjorie Kinnan Rawlings, *The Yearling*; 1940, John Steinbeck, *The Grapes of Wrath*; 1942, Ellen Glasgow, *In This Our Life*; 1943, Upton Sinclair, *Dragon's Teeth*; 1944, Martin Flavin, *Journey in the Dark*; 1945, John Hersey, *A Bell for Adano*.

Pulitzer Prize Plays

1918, Jesse Lynch Williams, *Why Marry?*; 1920, Eugene O'Neill, *Beyond the Horizon*; 1921, Zona Gale, *Miss Lulu Bett*; 1922, Eugene O'Neill, *Anna Christie*; 1923, Owen Davis, *Icebound*; 1924, Hatcher Hughes, *Hell-Bent for Heaven*; 1925, Sidney Howard, *They Knew What They Wanted*; 1926, George Kelly, *Craig's Wife*; 1927, Paul Green, *In Abraham's Bosom*; 1928, Eugene O'Neill, *Strange Interlude*;

1929, Elmer Rice, *Street Scene*; 1930, Marc Connelly, *The Green Pastures*; 1931, Susan Glaspell, *Alison's House*; 1932, George S. Kaufman, Morrie Ryskind, and Ira Gershwin, *Of Thee I Sing*; 1933, Maxwell Anderson, *Both Your Houses*; 1934, Sidney Kingsley, *Men in White*; 1935, Zoe Akins, *The Old Maid*; 1936, Robert Sherwood, *Idiot's Delight*; 1937,

George S. Kaufman and Moss Hart, *You Can't Take It with You*; 1938, Thornton Wilder, *Our Town*;

1939, Robert Sherwood, *Abe Lincoln in Illinois*; 1940, William Saroyan, *The Time of Your Life*; 1941,

Robert Sherwood, *There Shall Be No Night*; 1943, Thornton Wilder, *The Skin of Our Teeth*; 1944, Richard Rodgers and Oscar Hammerstein II, *Oklahoma* (special award); 1945, Mary Chase, *Harvey*.

DICTIONARY OF MYTHOLOGY

A

Acestes, king of Drepanum, aided Priam at Troy and entertained Æneas during the latter's voyage.

Achates, friend of Æneas, was famed for his fidelity.

Achelous, son of Tethys and Oceanus, became god of the River Achelous in Epirus and was slain by Hercules.

Achcron, son of Ceres, furnished the Titans with water during their war with the gods, and was changed into a river in Hades.

Achilles, son of Thetis and Peleus, was the most renowned Greek hero in the Trojan War; he killed Hector and was slain by Paris, who shot an arrow into Achilles' heel.

Acis, a Sicilian shepherd, the son of Faunus and Simaethius, was crushed by Polyphemus and transformed into a stream.

Actæon, son of Autonoë and Aristaëus, was changed into a stag and killed by his dogs because he watched Diana at her bath.

Admetus, son of Clymene and Pheres, became king of Phærae and was made immortal because Alcestis died for him.

Adonis, son of Myrrha and Cinyras, was loved by Venus who transformed him into a flower after he was killed by a boar.

Adrastus, king of Sicyon who led the Seven against Thebes.

Æacus, son of Jupiter and Ægina, was king of the Myrmidons and one of the three judges of souls in Hades.

Ægisthus, king of Argos, murdered Agamemnon with the aid of Clytemnestra, and both were killed by Orestes.

Æneas, son of Venus and Anchises, was king of Latium. His travels form the subject of Vergil's *Æneid*.

Æolus, god of the winds who gave Ulysses all the adverse winds contained in a bag.

Æsculapius, god of healing and son of Apollo, was struck with a thunderbolt by Jupiter as punishment for restoring the dead to life.

Agamemnon, son of Pleisthenes and Ærope, became a hero in the Trojan War and king of Mycenæ and Argos, but was murdered by his wife Clytemnestra and her lover Ægisthus.

Ajax, (1) son of Telamon and Periboea, was second only to Achilles in valor; failing to capture the arms of Achilles after the latter's death, he stabbed himself and the blood from his wound became the hyacinth; (2) son of Oileus, and surpassed in speed only by Achilles, was drowned by Neptune for boasting of his escape from a shipwreck.

Albion, son of Neptune and Amphitrite, is said to have founded Britain and introduced shipbuilding and astronomy.

Alcestis, daughter of Pelias and Anaxibia, died to make her husband

Admetus immortal, but Hercules restored her to life.

Alcinous, son of Nausithous and Periboca, was king of Phacacia and famed for his wonderful gardens.

Alcmene, daughter of Electryon and the mother of Hercules.

Alpheus, a river in Arcadia, was transformed by Diana into a fountain on the island of Ortygia.

Amazons, a tribe of warlike women near the Euxine Sea in Asia Minor; they aided Troy during the Trojan War.

Ambrosia, the food of the gods; anyone who ate it became immortal.

Ammon, the name used by Jupiter in Libya, where he appeared to Hercules in the form of a ram and revealed a fountain, on the site of which a temple with a famous oracle was built.

Amphiaraus, son of Oecleus or of Apollo, and Hypermnestra, was a famed prophet who joined the expedition of Adrastus against Thebes; before his enemies could slay him, he was swallowed up by the earth.

Amphion, son of Jupiter and Antiope, became king of Thebes and could move the stones of the city wall with the music of his lyre.

Amphitrite, daughter of Oceanus and Tethys; she was the wife of Neptune and mother of Triton.

Amphitryon, king of Thebes, avenged the deaths of Electryon's sons and married Alcmene, who bore Hercules.

Amycus, son of Neptune, was king of Melia and greatly skilled in boxing; he was killed by Pollux.

Amyone, daughter of Danaus and Europa, married Enceladus and murdered him on the marriage night. Neptune fell in love with her and carried her away from Hades.

Ancaeus, son of Neptune and Astypalaea, was pilot of the *Argo* and became king of Ionia; a wild boar killed him in the vineyard.

Anchises, son of Capys and Themis, and noted for his beauty, was courted on Mount Ida by Venus, who bore him Æneas.

Androcles, a Roman slave, was thrown into an arena to be killed by lions, but was saved by one of the animals because he had taken a thorn from its foot in an African cave.

Andromache, daughter of King Ection of Thebes, and wife of Hector, became the prize of Pyrrhus following Hector's death and the fall of Troy.

Andromeda, daughter of Cassiope and Cepheus, king of Ethiopia, was chained to a rock as a sacrifice to a monster sent by Neptune, but Perseus rescued and married her. After her death she became one of the constellations.

Antaeus, son of Terra and Neptune, was a giant wrestler, invincible while in contact with the earth. Hercules lifted him into the air and squeezed him to death.

Antenor, one of the wisest men of Troy, who allegedly built Padua in Italy.

Anticlea, the wife of Laertes and mother of Ulysses, hero of the *Odyssey*.

Antigone, daughter of Jocasta and Ædipus, was shut up in a cave by Creon as punishment for burying the body of her brother Polynices.

Antiope, daughter of King Nyctus of Thebes, became the wife of Jupiter and bore the twins Zethus and Amphion.

Anubis, an Egyptian god and watcher of the dead, was identified with Mercury.

Aphrodite, the Greek name for Venus.

Apollo, son of Jupiter and Latona, was the god of music and the arts, flocks and herds, prophecy, colonization, protection, and punishment. The oracle of Apollo at Delphi was renowned. He killed Cyclops and was banished from heaven by Jupiter, later serving nine years in Thessaly as a

shepherd. Apollo assisted Neptune in erecting the walls of Troy, but destroyed the inhabitants after King Laomedon declined to give him a promised reward.

Arachne, daughter of Idmon, was noted for her expert needlework, which was torn up by Minerva; Arachne hanged herself and was transformed into a spider.

Arcas, son of Jupiter and Callisto, was king of Pelasgia, which was renamed Arcadia in his honor.

Arethusa, a nymph who was chased by Alpheus in the Peloponnese and transformed by Diana into a fountain.

Argo, the ship on which Jason sailed in quest of the Golden Fleece.

Argonautae, the friends who accompanied Jason on the Argo, including Theseus, Hercules, Orpheus, Æsculapius, Nestor, Castor, and Pollux.

Argos, a city in ancient Greece, built by seven Cyclopes and ruled by Agamemnon during the Trojan War.

Argus, a monster with a hundred eyes; after it was killed by Mercury, Juno put its eyes on the tail of her peacock.

Ariadne, daughter of King Minos of Crete, aided Theseus to escape from the labyrinth where he was in danger of being killed by the Minotaur. A crown of seven stars, presented to her by Bacchus, became a constellation.

Arion, (1) a renowned musician who was rescued by a dolphin after he had leaped into the sea to escape from murderous sailors. (2) A winged horse, the offspring of Neptune and Ceres.

Aristaeus, son of Apollo and Cyrene, was the first to teach the management of bees. After his death he was made a god, and was regarded as the protector of the olive.

Artemis, the Greek name for Diana, goddess of the chase.

Ascalaphus, (1) son of Mars, and a leader in the Trojan War. (2) Son of Acheron, changed by the goddess

Proserpine into an owl after he testified that she had eaten pomegranates.

Asteria, daughter of Coeus, the Titan, and mother of Hecate, leaped into the sea after Zeus had courted her in the form of an eagle. She was transformed into an island that was later named Delos.

Astraea, daughter of Astræus (or Titan), was the goddess of justice, and became the constellation Virgo.

Atalanta, an Arcadian huntress famed for her swiftness.

Ate, goddess of infatuation and mischief who incited men to unwise actions.

Athamas, son of Æolus, and king of Orchomenos, fled with his wife Ino to Colchis on a golden ram whose fleece was later won by Jason. After being driven insane by Juno, Adamas murdered Learchus.

Athena, the Greek name for Minerva, goddess of wisdom, war, and the liberal arts.

Atlantis, a mythical island west of Gibraltar.

Atlas, son of Iapetus and Clymene, was transformed by Perseus into Mount Atlas, originating the legend that the heavens were borne on the shoulders of Atlas.

Atreus, son of Pelops and Hippodamia, was king of Mycenae and Argos, and the father of Agamemnon, Menelaus, and Plisthenes. As punishment for murdering the two sons of Thycstes and serving them to their father at a dinner, Atreus was cursed by the gods, and later killed by Ægisthus.

Atropos, one of the three Fates, cut the thread of life.

Augias, king of Elis, owned enormous stables (containing 3,000 oxen) which were not cleaned for 30 years. Sent to clean them, Hercules diverted the Alpheus River into the stables, and killed Augias when the latter declined to give him a reward.

Aurora, goddess of dawn, and the daughter of Hyperion and Thia.

Autolycus, son of Mercury and the father of Anticlea, was known as the master of thieves because he stole sheep and oxen.

Avernus, a fatal lake near which no birds could exist, was one of the entrances to Hades.

B

Bacchus, son of Jupiter and Semele, became the god of wine, and married Ariadne after she was deserted by Theseus.

Baucis, a woman of Phrygia, lived with her husband Philemon in a hut which was transformed by Jupiter into a temple as a reward for their hospitality.

Bellerophon, son of King Glaucus of Ephyra, slew the Chimaera and later attempted to fly to heaven on Pegasus, the winged horse, but was thrown to the earth and blinded by Jupiter.

Bellona, daughter of Phorcys and Ceto, was the goddess of war and sister of Mars.

Bergion and Albion, gigantic sons of Neptune, fought Hercules and were slain by rocks from heaven.

Bomonicae, young men who were lashed at the festivals held at the altar of Diana Orthia.

Bona Dea, the sister, wife, or daughter of Faunus, was the Roman goddess of chastity, and her festivals were held every May 1st by the Vestals.

Boreas, the northeast wind, was allegedly the son of Aurora and Astraeus, and carried Orithyia to Mount Haemus in Thrace.

Branchus, son of Smicrus of Miletus, delivered oracles at Didyme after Apollo had given him the power of prophecy.

Briareus, son of Coeleus and Terra, was a giant with a hundred hands and fifty heads, and aided the Olympians against the Titans.

Briseis, a woman taken at Lyrnessus by Achilles, and later by Agamemnon, was restored to Achilles after the death of Patroclus.

Busiris, son of Neptune and Libya, became king of Egypt and was slain by Hercules, whom he had captured.

C

Caballinus Fons, a fountain created on Mount Helicon by a blow from the hoof of Pegasus, and dedicated to the Muses.

Cacus, giant son of Vulcan and Medusa, was strangled by Hercules for stealing the latter's herds.

Cadmus, son of King Agenor of Phoenicia, killed a dragon and sowed its teeth in the ground, whereupon armed men sprang up and became the original population of Thebes. Cadmus married Harmonia and both were transformed into serpents.

Caduccus, the magic wand of Mercury which he used to lead the souls of the dead across the River Styx, and to restore the dead to life.

Caeneus, a girl who was transformed into a man by Neptune, joined the Calydonian hunt and the Argive expedition, and later became a bird.

Calchas, a high priest and prophet, noted for his predictions concerning the Trojan War.

Calliope, daughter of Jupiter and Mnemosyne, became the Muse of epic poetry and the mother of Orpheus by Apollo.

Callisto, daughter of King Lycaon of Arcadia; a servant of Diana, she was the mother of Arcas by Jupiter and was placed among the stars after being transformed into a bear.

Calydon, a city in Ætolia, was ravaged by a boar which Diana sent as punishment for the neglect of her divinity.

Calypso, queen of Orygia, was the goddess of silence; she detained Ulysses seven years because he refused her proposal of marriage.

Camilla, a servant of Diana, was the daughter of Queen Metabus of the Volscians, and was slain in a battle between Turnus and Æneas.

Cassandra, daughter of Hecuba and Priam, was given by Apollo the ability to foretell the future; but when she refused his love, he decreed that none of her prophecies should be believed. Clytemnestra killed her after the fall of Troy.

Castor. (See Dioscuri.)

Cecrops, said to be the first king of Attica and the founder of Athens.

Celaeno, daughter of Atlas, was beloved by Neptune, and was one of the Harpies.

Centaurs, a tribe of beings which were half horse and half man, living on Mount Pelion. The majority of them were slain by Jupiter in a contest with the Laphithae.

Cerberus, son of Typhon and Echidna, was a three-headed dog which guarded the entrance to Hades.

Ceres, called Demeter by the Greeks, the daughter of Rhea and Saturn, was the goddess of agriculture.

Cerynean Doe, the stag of Diana, never grew tired and had bronze hoofs and golden horns; it was captured by Hercules.

Ceto, daughter of Pontus and Gaea, became the wife of Phorcys and the mother of the Gorgons.

Chaos, a formless void which was the origin of the earth.

Charon, son of Nyx and Erebus, ferried the souls of the dead over the Styx and Acheron rivers to Hades.

Charybdis, a ravenous woman who was transformed into a whirlpool in the Strait of Messina.

Chimaera, son of Echidna, was a fire-breathing monster formed like a lion in front, a goat in the middle, and a dragon behind; it was killed by Bellerophon.

Chiron, son of Saturn and Philyra, was the wisest and most famous of the

Centaurs; Hercules slew him with an arrow.

Chloris, (1) the goddess of flowers, known to the Greeks as Flora; (2) the daughter of Nione by Amphion; (3) the wife of Neleus and mother of Nestor.

Chryseis, daughter of Chryses (a priest of Apollo), was captured by Achilles who gave her to Agamemnon. Apollo sent a plague forcing Agamemnon to return her to Chryses.

Circe, daughter of Perseis and Helios, was famed as a sorceress; after killing her husband, the Prince of Colchis, she was exiled to the Island of Æea. Ulysses and his companions were temporarily changed into swine by drinking from her magic cup.

Clio, the muse of history.

Clotho, one of the Three Fates, held the distaff on which the thread of life was spun.

Clymene, (1) a nymph of the sea, the daughter of Oceanus by Tethys, and the wife of Iapetus; (2) a nymph who became the mother of Phaeton by Apollo.

Clytemnestra, daughter of Leda and Tyndareus, lived in adultery with Ægisthus while her husband Agamemnon was at Troy; when Agamemnon returned she killed him, and was slain by her son Orestes.

Clytie, a nymph loved by Apollo; he transformed her into a sunflower because of her revengeful conduct toward Leucothoe.

Cocalus, a legendary king of Sicily, assisted Daedalus in the latter's flight from Crete.

Cocytus, the river of lamentation in Hades.

Colchis, located east of Euxine, was the home of the Golden Fleece.

Comus, the god of feasting and revelry.

Concordia, the goddess of peace or concord.

Coriolanus, an exiled Roman warrior who led the Volsci against Rome,

was induced by his mother and wife not to attack the city.

Cornucopia, the horn of plenty, was originally one of the horns of Achelous, broken off by Hercules and filled with flowers and fruit; it was also a symbol of Ceres.

Creon, king of Thebes, resumed his throne after giving it to Œdipus, and was so harsh to Antigone that he caused her lover, his son Haemon, to commit suicide.

Cronus. (See Saturn.)

Cupid, the god of love, was the son of Venus and Jupiter, and was known to the Greeks as Eros.

Cyclopes, a tribe of gigantic shepherds having but one eye in the center of the forehead; their home was near Mount Etna, and they served as Vulcan's assistants.

D

Daedalus, a mythical Athenian engineer and sculptor, built the Labyrinth after flying from Italy to Crete with his son Icarus.

Danae, daughter of Acrisius, was the mother of Perseus by Jupiter, who had wooed her in a shower of gold.

Danaus, son of King Belus of Tyre, fled with his fifty daughters to Argos where he was made king.

Daphne, a nymph who was transformed by Apollo into a laurel tree.

Daphnis, son of Mercury, was a Sicilian shepherd noted for his flute-playing; he was blinded for being faithless to a Naiad.

Dardanus, son of Jupiter and Electra, was allegedly the founder of Troy and ancestor of its inhabitants.

Deianira, wife of Hercules, who won her from Achelous.

Deidamia, daughter of Lycomedes, married Achilles and was the mother of Neoptolemus.

Delphi, site of the temple and oracle of Apollo.

Demeter, the Greek name for Ceres, goddess of agriculture.

Deucalion, son of Prometheus, and his wife Pyrrha were the sole survivors after Jupiter flooded Greece. They created new inhabitants by throwing stones which were transformed into people.

Diana, called Artemis by the Greeks, was goddess of the hunt and the twin sister of Apollo.

Dido, queen of Carthage; according to Vergil she fell in love with Æneas, and killed herself when the latter departed.

Diomedes, (1) son of King Tydeus of Argos, was a Greek hero during the Trojan War; (2) a king of Thrace, killed by Hercules.

Dionysus, the Greek name for Bacchus, god of wine.

Dioscuri, the name applied to Castor and Pollux, twin sons of Leda and Tyndareus. They rescued Helen from Theseus and sailed with Jason in quest of the Golden Fleece. Regarded as the gods of mariners, they were permitted after death to share alternate days in heaven and Hades.

Dodona, site of a sacred temple of Zeus and a talking oak that spoke his commands.

Doris, the wife of Nereus and daughter of Oceanus and Tethys.

Dryads, the nymphs of the trees.

E

Echidna, daughter of Calirrhoe and Chrysaor, was a female with the body of a dragon; her offspring by Typhon included Hydra, Chimaera, Cerberus, Sphinx, Scylla and other monsters.

Echo, a nymph who loved Narcissus in vain, pined away until only her voice remained.

Electra, (1) daughter of Agamemnon and Clytemnestra, was the sister of Orestes and the wife of Pylades; (2) one of the seven daughters of Atlas; (3) daughter of Oceanus and Tethys, and mother of Iris and the Harpies.

Electryon, a king of Mycenae, was

the son of Perseus and Andromeda, and the father of Alcmene.

Elysium, also called the Elysian Fields, was the home of the souls of those who were blessed.

Enceladus, created by Gaea to punish Jove, was a monster with one hundred arms.

Endymion, a beautiful youth who was put into a perpetual sleep by Selene, goddess of the moon.

Epimetheus, son of Iapetus and Clymene, was the brother of Prometheus and husband of Pandora.

Erato, the Muse of lyric and erotic poetry.

Erebus, son of Chaos, was a god of Hades, and his name was used in reference to the dark region through which souls traveled to Hades.

Eros. (See Cupid.)

Eumenides, or Furies, were three hideous winged women who pursued and punished guilty individuals.

Euphrosyne, one of the three Graces, daughters of Jupiter.

Europa, daughter of Phoenix, was carried by Jupiter to Crete, and was the mother of Sarpedon, Rhadamanthys, and Minos.

Eurydice. (See Orpheus.)

Eurynome, mother of the three Graces by Jupiter.

Eurypylus, son of Neptune, was killed by Hercules.

Euterpe, the Muse of lyric poetry or music.

Evander, son of Mercury, led a colony to Italy from Arcadia, and taught the blessings of peace.

F

Fama, goddess of fame, had a hundred tongues and spoke the utterances of Jupiter through a trumpet.

Faunus, son of Picus and father of Latinus, was the god of agriculture and shepherds, and was identified with Pan by the Greeks.

Flora, goddess of flowers, known to the Greeks as Chloris.

Fornax, goddess of bakery.

Fortuna, goddess of chance or fortune, also called Tyche.

Furies. (See Eumenides.)

G

Gaea, daughter of Æther and Hemera, was the goddess of earth, and the mother of Uranus and Pontus.

Galatea, a statue carved by Pygmalion and brought to life by Venus.

Galeus, son of Apollo, was an ancestor of the Sicilian prophets.

Galinthias, daughter of Proetus and friend of Alcmene, was transformed into a weasel.

Ganymede, beautiful son of Tros, was carried on the back of an eagle to Mount Olympus where he became Jupiter's cup-bearer.

Genius Loci, the special god assigned to a particular place or building.

Glaucus, (1) a fisherman who carried off Ariadne from Naxos, and became a god of the sea; (2) a king of Ephyra and father of Bellerophon; (3) a Greek slain by Ajax in the Trojan War; (4) son of Pasiphae, was smothered to death in honey.

Golden Fleece, the wool of the ram Chrysomallus, was placed on a tree at Colchis and guarded by a dragon, but later won by Jason and the Argonauts.

Gordius, a peasant, tied his wagon to his patron god's temple with the famous Gordian Knot. Anyone able to untie the knot would be destined to rule Asia, and Alexander the Great later severed it with a sword.

Gorgons, three maidens known as Euryale, Medusa, and Stheino, were the daughters of Phorcys; their heads were covered with serpents instead of hair.

Graces, known to the Greeks as Charites, were the daughters of Jupiter and Eurynome, and represented grace and beauty; called Euphrosyne, Pasithea, and Thalia, they

are generally depicted as attendants of Venus.

Græac, or Grey Maids, known as Perphredo, Deino, and Enyo, daughters of Phorcys, were hideous hags with one eye and one tooth.

Gryphon, or Griffin, a monster having the head of an eagle and the body of a lion.

Gyes, or Gyges, one of three gigantic offspring of Uranus and Gaea, had fifty heads and a hundred hands.

H

Hades, (1) the dark underworld to which the souls of the dead were ferried by Charon; (2) god of the underworld, sometimes called Pluto, was the son of Saturn and the brother of Jupiter and Neptune.

Haemon, son of King Creon of Thebes, was the lover of Antigone and killed himself when he heard of her death.

Halcyone, daughter of Æolus, leaped into the ocean after finding the dead body of Ceyx, her husband; both were transformed into kingfishers.

Halirrhothius, son of Neptune, carried away Alcippe and was killed by Mars.

Harmonia, daughter of Mars and Venus, married Cadmus and had a necklace which brought misfortune.

Harpies, the offspring of Electra and Thaumias, were demons with female heads, wings, and long claws; known as Aello, Ocypete and Celaeno, they were sent by the gods to torment mortals.

Hebe, goddess of youth and the daughter of Jupiter and Juno, was named Juventas by the Romans, and served as cupbearer to her father and the other gods.

Hecate, daughter of Perses and Asteria, and identified with Diana on earth, Luna in heaven, and Proserpine in Hades; she was a powerful goddess of magic and enchantment, frequently depicted as having three heads,

Hector, son of Priam and Hecuba, and husband of Andromache, was a Trojan hero during the siege of Troy; after killing Patroclus, he was slain by Achilles.

Hecuba, wife of Priam, was captured by Ulysses after the fall of Troy; she threw herself into the sea at Cyneum because she failed to avenge the killing of her son Polydorus.

Helen, daughter of Jupiter and Leda, and noted for her beauty, married King Menelaus of Lacedaemon. Paris caused the Trojan War by carrying her away to Troy. She later married Deiphobus, but betrayed him to regain the favor of Menelaus.

Helenus, son of Hecuba and Priam, was a prophet who deserted the Greeks during the Trojan War.

Helicon, a Boeotian range of mountains, was sacred to the Muses and Apollo.

Heliuss, or Sol, god of the sun, drove daily a chariot across the sky.

Helle, son of Athamas and Nephelæ, fell off the golden ram Chrysomallus and was drowned in the sea, which became known as the Hellespont.

Hephaestus, the Greek name for Vulcan, god of fire.

Hera, the Greek name for Juno, wife of Jupiter.

Hercules, known to the Greeks as Heracles, was the son of Jupiter and Alcmene, and performed many remarkable feats of strength. He married Deianira who poisoned him by means of a garment drenched with the blood of Nessus. After his death Hercules was taken to Mount Olympus and granted eternal life.

Hermaphrodite, son of Hermes and Aphrodite, united with a nymph and became both male and female.

Hermes, the Greek name for Mercury, messenger of the gods.

Hermione, the daughter of Helen and Menelaus, was the wife of Neoptolmus.

Hero, a priestess of Venus at Sestos, and the lover of Leander.

Hesperides, three daughters of Hesperus and Atlas, were assigned to protect the golden apples given to Juno by Earth.

Hesperus, the evening star, son of Astracus and Eos.

Himerus, the god of desire and the companion of Cupid.

Hippoerene, a fountain on Mount Helicon, set flowing by Pegasus and dedicated to the Muses.

Hippodamia, (1) daughter of Cœnomaus and wife of Pelops; (2) wife of Pirithous, at whose wedding the Centaurs caused a war against the Lapiths.

Hippolyta, a queen of the Amazons, was slain by Hercules.

Hippolytus, son of Theseus and Antione, was accused of trying to dishonor Phædra (his stepmother), and was slain in his chariot by Neptune.

Horn of Plenty, see Cornucopia.

Hours, three companions who accompanied Apollo in his chariot, were the daughters of Jupiter and Themis, and were called Irene, Dike, and Eunomia.

Hyacinthus, a beautiful youth who was accidentally slain by Apollo during a game of quoits, and from whose blood sprang the hyacinth.

Hydra, son of Echidna, a water monster with seven or more heads, each of which grew again when severed; he was slain by Hercules.

Hygeia, the goddess of health, and daughter of Asclepius.

Hymen, the god of marriage, and son of Apollo.

Hyperion, son of Uranus, married Thea and became the father of Helios, Selene, and Eos.

Hypnos, a god of slumber.

I

Iamus, son of Apollo and Evadne, became a prophet.

Icarius, (1) a prince of Sparta and

father of Penelope; (2) an Athenian who was driven insane by Bacchus.

Icarus, son of Daedalus, attempted to fly from Crete to Italy with wings fastened by wax to his shoulders; the sun melted the wax, causing him to fall into the sea.

Icelus, a god of dreams and an attendant of Morpheus.

Idmon, son of Apollo and Cyrene, was a noted Argonaut soothsayer.

Io, daughter of King Inachus of Argos, was loved by Jupiter, who transformed her into a heifer; later she recovered her human form and bore Jupiter a son.

Iphigenia, daughter of Agamemnon and Clytemnestra, was in danger of being sacrificed when Artemis carried her away to Tauris; becoming a priestess, she helped to save the life of her brother Orestes.

Iris, daughter of Electra and Thaumias, was goddess of the rainbow and messenger of Juno.

J

Janus, the Roman god of doors, had two faces, each looking in the opposite direction.

Jason, son of Acimede and Æson, won the Golden Fleece from King Aetes of Colchis by performing difficult feats with the help of Medea, daughter of Aetes.

Jocasta, the wife of Laius and mother of Œdipus.

Jove, a name frequently applied to Jupiter.

Juno, known to the Greeks as Hera, was the daughter of Rhea and Saturn; she married Jupiter, becoming the queen of heaven, and was the mother of Hebe, Mars, Vulcan, and Lucinia.

Jupiter, known to the Greeks as Zeus, was the son of Rhea and Saturn; as a child he vanquished the Titans and later became king of heaven. Although married to Juno, he had numerous love affairs with mortal

maidens including Io, Leda, and Danae.

L

Labryinth of Crete, an enclosed maze built by Daedalus, where Theseus slew the Minotaur.

Lachesis, one of the three Fates who decided the events and actions of life.

Ladon, the dragon assigned to guard the Apples of the Hesperides.

Laertes, king of Ithaca, was the husband of Anticlea and father of Ulysses.

Lacstrygonians, a savage tribe which destroyed the ships of Ulysses.

Laocoön, son of Priam, was a priest of Apollo. Because he opposed the entrance into Troy of the Greek wooden horse, Minerva sent two enormous snakes which crushed Laocoön and his two sons.

Laodamia, daughter of Acastus, married Protesilaus who died but was restored to life for three hours in response to her prayers.

Lares, the spirits of ancestors, watch over dwellings.

Latona, daughter of Phoebe and Coeus, was the mother of Diana and Apollo by Jupiter.

Leander, a young man of Abydos, swam each night across the Hellespont to woo Hero, a priestess in Sestos. He drowned when a lamp, which Hero hung from a tower to guide him, was blown out by a storm.

Leda, wife of King Tyndarus of Sparta, was wooed by Jupiter who appeared in the shape of a swan. She brought forth two eggs from which came Helen, Castor, and Pollux.

Lethæ, the river of forgetfulness in Hades.

Lotis, a nymph who was transformed into the lotus plant and was plucked by Dryope.

Lotus-Eaters, an idle race of people visited by Ulysses, ate lotus plants to forget all past events.

Lucina, the Roman goddess of childbirth.

Luna, the Roman goddess of the moon, also known as Selene.

Lupercus, the Roman god of shepherds, identified with Pan.

Lycomedes, king of the Dolopians, who were the slayers of Theseus.

Lycurgus, king of Thrace, was slain because he persecuted Bacchus.

Lyre, a harp-like musical instrument made by Mercury, having nine strings in tribute to the nine Muses.

M

Maia, daughter of Atlas, was the goddess of plains and the mother of Mercury by Jupiter.

Mars, known to the Greeks as Ares, the god of war, was the son of Jupiter and Juno and a lover of Venus.

Medea, daughter of King Acetes of Colchis and sister of Absyrtus, married Jason after helping him to win the coveted Golden Fleece. She craftily tricked the daughters of Pelias into murdering their father, and sent Glauce (for whom Jason had deserted her) a poisoned garment.

Medusa, one of the Gorgons, transformed into stone anyone who looked at her; she was slain by Perseus.

Megaera, one of the Eumenides or Furies.

Meleager, son of Althaea and King Ceneus of Ætolia, slew the boar which had been sent by Diana to ravage Calydon; he afterward killed Althaea's brothers because they objected to his giving the animal's skin to Atalanta.

Melpomene, the Muse of tragedy.

Menelaus, brother of Agamemnon and king of Sparta, began the Trojan War when his wife Helen was carried away by Paris.

Mentor, son of Alcinoüs, was the friend and adviser of Ulysses, and educated the latter's son Telemachus.

Mercury, known to the Greeks as Hermes, was the son of Jupiter and Maia, and became messenger of the gods because of his great swiftness. He

was the god of speed, commerce, oratory, wrestling, and thievery.

Metabus, the father of Camilla, was chief of the Volscians, who were conquered by the Romans.

Metis, son of Oceanus, and first wife of Jupiter, who swallowed her after being warned by Prometheus that she was fated to bear a son to replace him as king of heaven.

Midas, son of Gordius, king of Phrygia, prayed that whatever he touched might become gold, and his wish was granted by Bacchus. As punishment for judging Pan's music to be better than that of Apollo, Midas was given the ears of an ass.

Milanon, favored by Venus, won Atalanta by defeating the latter in a foot-race.

Minerva, known to the Greeks as Athena or Pallas, sprang fully grown from the brain of Jupiter, and became the goddess of wisdom, war, and the liberal arts; she produced the olive, which the gods considered more useful than the horse.

Minos, (1) king of Crete and son of Europa, was made a judge of the souls in Hades; (2) a king of Crete who married Pasiphae and owned the Labyrinth.

Minotaur, the offspring of Pasiphae and a steer, was half man and half bull, and was confined in the Labyrinth. Each year he ate seven youths and seven maidens whom the Athenians were forced by Minos to send, until Theseus slew the monster with the help of Ariadne.

Mnemosyne, the goddess of memory and mother of the Muses by Jupiter.

Momus, the son of Nyx, was the god of mirth.

Morpheus, the son of Somnus, was the god of slumber and dreams.

Musacus, the son of Orpheus, became a sacred poet.

Muses, nine daughters of Jupiter and Mnemosyne; their names and at-

tributes were as follows: Calliope, epic poetry; Terpsichore, dancing; Erato, erotic poetry; Thalia, comedy and lyric poetry; Melpomene, tragedy; Polyhymnia, eloquence; Urania, astronomy; Euterpe, music; Clio, history.

Myrmidons, the subjects of Æacus, were transformed from ants into men by Jupiter.

N

Naiads, nymphs of streams, fountains, and brooks.

Narcissus, son of Cephisus, was caused by Venus to fall in love with his own reflection because he scorned the love of Echo; he pined away and was transformed into a flower.

Necessitas, goddess of necessity, was irresistible to gods and men; she fastened with brass nails all decrees made by the Eumenides.

Nemesis, daughter of Nyx, was the goddess of retribution, meting out joy or unhappiness to mortals and avenging evil deeds.

Neptune, called Poseidon by the Greeks, was the son of Saturn and Rhea, and the brother of Pluto and Jupiter. Often depicted as riding across the ocean in a chariot, holding a trident, Neptune was god of the sea and of horses.

Nereus, son of Terra and Oceanus, was a god and prophet frequently called the Old Man of the Sea; he lived in the Ægean Sea and married Doris, by whom he had fifty daughters known as the Nereides.

Nestor, son of Neleus and grandson of Neptune, became king of Pylos and aided the Lapiths in their war against the Centaurs; he later served as adviser of Agamemnon at Troy.

Niobe, daughter of Tantalus, married Amphion and bore seven sons and seven daughters. She scorned Latona because the latter had but two children, Diana and Apollo, where-

upon all of Niobe's offspring except Chloris were slain. Jupiter transformed Niobe into a stone, which shed constant tears during the summer.

Nisus, king of Megara, died when his daughter, Scylla pulled out the lock of violet hair on which his life depended. He was then transformed into a sea eagle.

Nymphs, female goddesses of nature, including the Oceanides, Nereides, Naiads, Oreades, Dryads, Hamadryads, and Sylphs.

Nyx, mother of Erebus, later became his wife.

O

Oceanides, the daughters of Oceanus, were nymphs of the sea.

Oceanus, god of the ocean and the father of all water nymphs and river gods.

Ocypete, one of the three Harpies.

Odysseus, the Greek name for Ulysses.

Œdipus, son of Jocasta and Laius, killed the latter and became king of Thebes after solving the riddle of the Sphinx. He married his own mother and became the father of Polynices, Ismene, Antigone, and Eteocles.

Œneus, king of Calydon, who married Althea and was the father of Meleager, is said to have introduced the art of wine-making.

Œnomaus, son of Mars and Sterope, became king of Pisa and was the father of Hippodamia.

Œnonc, a nymph, married Paris who deserted her for Helen.

Œnopion, son of Bacchus and father of Merope, intoxicated Orion and blinded him while he slept.

Olympus, a mountain of Thessaly and Macedonia, was the home of the principal gods and goddesses.

Omphale, daughter of Jardanus, was queen of Lydia; she bought Hercules when he was ordered to be sold as a slave, and bore him a son.

Ophion, (1) the leader of the

gigantic Titans; (2) the companion of Cadmus.

Oracle, a shrine where the gods gave commands and advice to mortals.

Oreades, the nymphs of the mountains.

Orestes, son of Clytemnestra and Agamemnon, avenged the killing of his father by slaying his mother and her lover Ægisthus. He was pursued by the Furics until the court of Areopagus acquitted him of the deed.

Orion, a gigantic hunter, was promised the hand of Merope, daughter of king Œnopion of Chius, if he could rid the island of wild animals. After accomplishing this task he was blinded by Œnopion, but regained his sight by facing the sun, and later became a constellation.

Orpheus, son of Calliope and Œagrus, followed his wife Eurydice to Hades after she had been killed by a snake. With the exquisite music of his lyre he charmed Pluto, who decreed that she could return to earth with Orpheus if the latter did not look back at her until he crossed the boundary of Hades; but he looked and thus lost Eurydice forever.

Otus, giant son of Neptune, with the aid of Ephialtes imprisoned Mars who was later released by Mercury.

P

Palamedes, son of Nauplius, was a Greek hero during the Trojan War; his enemy Ulysses had him killed by the Greeks.

Palladium, an image of Pallas, on which depended the safety of Troy, was taken by Diomedes and Ulysses.

Pallas, (1) a Greek name for Minerva; (2) the son of Eurybia and Crion; (3) the grandson of Mercury, aided Æneas in Italy.

Pan, a son of Mercury, was the god of shepherds, flocks, and rural persons; usually depicted as having two horns and the legs of a goat, he was mis-

thievous and fond of playing music on pipes.

Pandora, made from the earth by Vulcan at the command of Jupiter, was the first woman and the wife of Epimetheus. Opening a forbidden box, she released every kind of illness and evil which went forth to torment mankind.

Parcae, the three Fates who controlled the destiny of mortals, were as follows: Atropos, who cut the thread of life; Clotho, who held the distaff on which was spun the thread of life; Lachesis, who turned the spindle and determined the happenings of life.

Paris, son of Priam and Hecuba, and husband of C  none, was chosen to select the fairest of the goddesses and chose Venus, who awarded him Helen. By taking the latter to Troy he caused the Trojan War, in which he received a fatal wound.

Parnassus, a sacred mountain in Phocis, was dedicated to Apollo, Bacchus, and the nine Muses.

Pasipha  , daughter of Helios, was the wife of King Minos of Crete; Neptune caused her to fall in love with a bull, and her offspring by the animal was the Minotaur.

Pasithea, or Aglaia, one of the three Graces.

Patroclus, son of Menoetius and companion of Achilles in the Trojan War, was slain by Hector.

Pax, the Roman goddess of peace, known to the Greeks as Irene.

Pegasus, a winged horse which sprang from the blood of Medusa, was given to Bellerophon who attempted to ride to heaven on the animal's back. He fell off when Jupiter sent a gadfly to sting Pegasus; the latter reached Olympus alone and was transformed into a constellation.

Peleus, son of   acus and husband of Thetis, became the father of Achilles.

Pelion, a mountain of Thessaly, on which the Titans placed Mount Ossa

to help them climb to Olympus and fight against the gods.

Pelops, the son of Tantalus; cut into pieces by his father and presented to the gods, he was restored to life and won the hand of Hippodamia by defeating C  naurus in a chariot race.

Penelope, the wife of Ulysses.

Penthesilia, a queen of the Amazons, fought against the Greeks in the Trojan War and was slain by Achilles.

Pentheus, a king of Thebes, was torn to pieces by his mother Agave and her sisters.

Perdix, an apprentice of Daedalus, was said to have invented the saw and the compass.

Perse, daughter of Oceanus and wife of Helios, was the mother of Circe, Pasipha  , Perseus, and   etes.

Persephone, the Greek name for Proserpine, queen of Hades.

Perseus, son of Jupiter and Dana  , was ordered by Polydectes to obtain the head of Medusa, and slew the latter with the aid of Pluto's helmet which made him invisible. Returning to the court with the head, he saved his mother Dana   from being forced to marry Polydectes.

Pegasus, the winged cap worn by Mercury.

Phaethon, son of Helios, was killed while attempting to drive his father's chariot across the heavens.

Philemon. (See Baucis.)

Phlegethon, the river of flames in Hades.

Phoebus, a name frequently used for Apollo.

Phoenix, (1) the mother of Europa; (2) an instructor of Achilles; (3) a bird of Egypt that was magically reborn in flames.

Phorcys, a sea god, was the son of Ga  a and Pontus and the husband of Ceto; among his offspring were the Gorgons, the Gra  ac, and the Sirens.

Picus, god of prophecy and the son of Saturn, was transformed into a woodpecker.

Pleiades, the seven daughters of Atlas, were chased by Orion and transformed into doves; they were later placed in the heavens as a constellation.

Plisthenes, son of Atreus and Cleola, was the first husband of Ærope and the father of Agamemnon and Achilles.

Pluto. (See Hades.)

Pollux. (See Dioscuri.)

Polynices, the son of Œdipus and Jocasta, and brother of Eteocles, persuaded King Adrastus of Argos to send an army led by seven generals to force Eteocles to surrender the crown of Thebes. After a prolonged battle, the two brothers resolved to settle their dispute in single combat and both were killed.

Polyphemus, son of Neptune and leader of the one-eyed Cyclopes, lived in a cave near Mount Ætna and ate six of the companions of Ulysses; the latter then blinded Polyphemus and escaped.

Poseidon, the Greek name for Neptune, god of the sea.

Priam, son of Laomedon, became king of Troy and married Hecuba, becoming the father of fifty sons including Paris and Hector, but was slain by Neoptolemus.

Priapus, son of Venus and Bacchus, was the god of fertility.

Prometheus, one of the Titans, was a benefactor of mankind and stole fire from Olympus; he was chained to a rock while an eagle tore at his liver until he escaped with the aid of Heracles.

Proserpine, called Persephone by the Greeks, was the daughter of Ceres, and was carried away to Hades by Pluto with whom she had to spend a third of each year.

Proteus, son of Neptune, was a soothsayer on the island of Pharos; while awake he assumed various shapes to avoid being recognized, and his prophecies were heard only when he slept.

Psyche, a nymph who married Cupid and was granted immortality despite the hatred of Venus.

Pygmalion, a sculptor of Cyprus, carved an ivory statue which was brought to life by Venus and named Galatea.

Pylades, son of King Strophius of Phocis, was the friend of Orestes and married the latter's sister Electra.

Pyrrhus, a name frequently applied to Neoptolemus.

Python, a monstrous snake born from the mud after the Deucalion deluge, lived in caves on Mount Parnassus and was killed by Apollo.

R

Remus. (See Romulus.)

Rhadamanthys, son of Jupiter and Europa, was appointed one of the three judges of souls in Hades.

Rhea, one of the Titanides, and goddess of the earth, was the wife of Saturn and mother of Jupiter.

Rhodos, daughter of Neptune, was the mother of seven sons by Helius.

Romulus, brother of Remus and son of the vestal virgin Sylvia, was thrown with Remus into the Tiber River when their mother was buried alive, but the two children were saved and suckled by a she-wolf. Romulus is said to have founded the city of Rome.

S

Salus, a Roman goddess of prosperity, health, and public welfare.

Sappho, a Greek poetess, sometimes called the tenth Muse, leaped into the ocean after she was scorned by Phaon.

Saturn, identified with the Greek deity Cronus, was the son of Uranus and Terra. Known as the god of agriculture, he married Rhea who hid her sons Jupiter, Neptune, and Pluto because Saturn always ate his offspring.

Satyr, the gods of fields and forests, were followers of Bacchus and are usu-

ally depicted as having the legs of a faun.

Scylla, (1) a nymph, the lover of Glaucus, was transformed into a dangerous rock in the Strait of Messina; (2) the daughter of King Nisus of Megara and the lover of Minos.

Seasons, known as Ver, Æstas, Autumnus, and Hyems, were companions of Apollo.

Selene, the Greek name for Luna, goddess of the moon.

Semele, daughter of Harmonia and King Cadmus of Phoenicia, gave birth to Bacchus by Jupiter after she had been killed by a bolt of lightning.

Seven Against Thebes, the seven generals (Amphiarus, Polynices, Tydeus, Capaneus, Parthenopæus, Hippomedon, and King Adrastus of Sicyon) who battled the forces of King Eteocles of Thebes.

Sibyl, a seeress of Cumæ, from whom Tarquin bought the Sibylline books; according to most authorities there were nine other prophetesses also called Sibyl.

Silenus, an old Satyr, was the companion of Bacchus.

Sinon, a Greek spy in the Trojan War, released his companions from the Wooden Horse.

Sirens, daughters of Phorcys, were sea nymphs with wings and claws, who by means of irresistible songs lured mariners onto perilous rocks.

Sirius, the dog of Orion, became a constellation.

Sisyphus, son of Ætolus, was doomed in Hades to roll uphill an enormous stone which always rolled down again after he had reached the top.

Somnus, son of Morpheus, was a god of slumber.

Sphinx, a monster of Thebes having the head of a woman and the winged body of a lion; those who failed to answer correctly her riddle were thrown into an abyss.

Sthenelus, (1) son of Andromeda and Perscus; (2) grandson of Minos

and friend of Hercules; (3) son of Evadne and Capaneus, was a descendant of the Seven Against Thebes.

Styx, the river in Hades across which Charon ferried the souls of the dead.

Sylphs, the nymphs of the air.

Syrinx, a nymph who was loved by Pan, was transformed into the reeds which he used to make his pipes.

T

Talaria, the winged sandals worn by Mercury.

Tantalus, a son of Jupiter and father of Niobe, was doomed in Hades to suffer from constant thirst while surrounded by water and fruit that he was unable to grasp.

Tartarus, a black pit in which the Cyclopes, Centimani, and Titans were imprisoned by Uranus; also the dark torture-chamber of Hades.

Tclamon, son of Æacus and father of Ajax, sailed with Jason in quest of the Golden Fleece and hunted for the Calydonian boar.

Telcgonus, son of Circe and Ulysses, slew the latter and married Penelope.

Telemachus, son of Ulysses and Penelope.

Telephus, son of Hercules, aided the Greeks in the Trojan War and was wounded by Achilles.

Tereus, a king of Thrace, married Procue and later Philomela; he cut out the tongue of his second wife, whereupon Procue slew her son Itys whose flesh she served to Tereus, and the gods transformed them into birds.

Terpsichore, the Muse of the dance.

Thalia, (1) one of the three Graces; (2) the Muse of comedy and lyric poetry.

Themis, the goddess of law and justice, was the mother of the three Hours by Jupiter.

Theophane, a maiden loved by Neptune, was the mother of the ram whose golden fleece was won by Jason.

Theseus, son of Æthra and King Ægeus of Attica, slew the Minotaur with the aid of Ariadne, whom he took away with him and deserted at Naxos. He captured the queen of the Amazons and carried Helen to Athens from Sparta.

Thetis, one of the fifty Nereides, was the mother of Achilles by Peleus.

Thisbe, a maiden loved by Pyramus; the latter slew himself in the belief that she had been murdered, and Thisbe ended her own life after finding his body.

Tiresias, a famous blind prophet of Thebes who was consulted by Ulysses.

Tisiphone, one of the three Furies, was the avenger of murder.

Titans, gigantic sons of Gaea and Uranus, waged a war against Jupiter for ten years; their sisters were called Titanides.

Tithonous, son of Laomedon and lover of Aurora, was granted immortality and transformed into a grasshopper.

Triton, a sea god half man and half fish, was the son of Neptune and Amphitrite, and calmed the waves with his horn.

Tyndareus, a king of Sparta, married Leda and was the father of Castor and Clytemnestra.

Typhon, a monster with a hundred heads breathing fire and smoke, was created by Gaea to attack Jupiter.

U

Ulysses, called Odysseus by the Greeks, was the son of Laertes, became king of Ithaca and invented the wooden horse used in the Trojan War. After wandering twenty years, he returned home and slew the suitors who had wooed his wife Penelope during his absence. He was killed by Telegonus, his son by Circe.

Urania, the Muse of astronomy.

Uranus, god of heaven, was the father of the Titans and Titanides by Gaea, and was dethroned by Saturn.

V

Veiovis, a Roman god of lightning.

Venus, called Aphrodite by the Greeks, the goddess of love and beauty and the mother of Cupid; one legend states that her parents were Jupiter and Dione, while another claims she was born from the foam of the ocean.

Vertumnus, a Roman god of changing seasons and the husband of Pomona.

Vesta, the goddess of the hearth, whose temples contained sacred fires tended by the Vestal Virgins.

Vulcan, called Hephaestus by the Greeks, was the god of fire and the son of Jupiter and Juno. Born lame, he was banished from Mount Olympus and became the blacksmith of the gods, forging armor and thunderbolts in workshops located in volcanic mountains.

W

Winds, sons of Astræus and Eos, were Eurus, Zephyrus, Boreas, Æolus, Aura, and Notus.

Wooden Horse, invented by Ulysses, was wheeled within the gates of Troy under the pretense that it would be a gift in honor of Minerva, but Greek warriors concealed in the hollow interior of the horse were released by Sinon and overcame the Trojans.

X

Xanthus, a river god who pursued Achilles over the plains after the fall of Troy, but was halted by flames from the workshop of Vulcan.

Z

Zephyrus, the west or southwest wind, the son of Eos and Astræus.

Zethus, son of Jupiter and Antiope, and twin brother of Amphion, slew King Lycus and tied the latter's wife to a wild bull which dragged her over steep rocks until she died.

Zeus, the Greek name for Jupiter, king of the gods.

ENGLISH USAGE

GRAMMAR

Parts of Speech

The Noun.

A *noun* is the name of a person, place, or thing.

book, table, Edward, army, peace

A *proper noun* is the name of a particular person, place, or thing.

Edward, Europe, New York City, "My Old Kentucky Home"

A *common noun* is the name of any one of a class of things.

book, typewriter, building, sky

A *collective noun* is the name of a group of persons or things taken as a whole.

army, fleet, Congress, class

Nouns have *number*. A noun that refers to one person, place, or thing is of *singular* number. A noun that refers to more than one is *plural*.

rug, rugs; man, men; church, churches; echo, echoes; tobacco, tobaccos

Nouns are of three *cases*. A noun is in the *nominative* case when it is used as the *subject* of a sentence or as a *predicate nominative*.

The narrator had a fine, clear voice.
He is our new president.

A noun is in the *objective* case when it is the *object* of a verb or the *object* of a preposition.

The narrator had a fine, clear voice.
Charles was late for school today.

Possessive case indicates ownership.

Edward's story, time's passage, women's hats, words' endings

The Pronoun.

A *pronoun* is a word used instead of a noun. There are five kinds of pronouns: *Personal*—I, you, he, them. *Relative*—that, which, who, what. *Interrogative*—who? what? which? *Definite*—this, that, these, those. *Indefinite*—each, every, any, all, neither, many.

A pronoun must agree with the noun to which it refers, its antecedent, in person, number, and gender.

John ate his supper quickly.

The antecedent of *his* is *John*; that is, it is the noun for which *his* stands. *John* is in the third person so the pronoun must be in the third person. *John* is singular so the pronoun must be singular. *John* is masculine so the pronoun must be masculine.

Personal pronouns and one relative pronoun, *who*, change their form in different cases:

	NOMINATIVE		
	SINGULAR	PLURAL	

FIRST PERSON	I	we	who
SECOND PERSON	you	you	"
THIRD PERSON	he	they	"
	she	they	"
	it	they	"

	OBJECTIVE		
	SINGULAR	PLURAL	

	me	us	whom
	you	you	"
	him	them	"
	her	them	"
	it	them	"

The Verb.

A *verb* is a word that indicates action or state of being on the part of its subject.

She was on time.
George plays baseball well.

There are three kinds of verbs: *transitive*, *intransitive*, and *copulative*. A transitive verb is one that requires an object to complete its meaning.

The car hit the stanchion in the middle of the road.

An intransitive verb is one that does not require an object to complete its meaning.

Pigs squeal.
Time flies.

A copulative verb is one that links the subject to a predicate nominative or a predicate adjective.

Carl was class chairman last term.
Helen is always neat.
Mr. Southworth seems pleased.

Verbs are also classified on the basis of how they form the past tense. A *regular verb* is one which forms its past tense by adding *d* or *ed*.

breathe, breathed; walk, walked; open, opened

An *irregular verb* is one which forms its past tense in some other way.

see, saw; write, wrote; go, went; sing, sang

Verbs must agree with their subjects in person and number. In the present tense, this usually means that they change their form for the third person singular.

Verbs may be in the *active* or *passive voice*. Active voice means that the subject of the verb is performing the action.

Birds fly.
George drove the car to the station.
Many strange animals inhabit the jungle.

Passive voice means that the subject of the verb is acted upon.

The car was driven to the station by George.
The jungle is inhabited by many strange animals.

The *tense* of a verb is an indicator of time. There are three main tenses: *present*, *past*, and *future*.

I walk, I walked, I shall walk.

The *present perfect tense* is used to indicate an action begun in the past and completed recently or in the present.

I have walked.

The *future perfect tense* is used to indicate an action that will be completed in the future.

I shall have walked.

Verbs are often used in other forms: the *infinitive*, the *participle*, and the *gerund*. The infinitive is formed by adding "to" to the verb. It may be used in many cases like a noun and is often called a verbal noun. It may be used as a subject:

To err is human;

as an object of a verb:

He likes to dance;

as an object of a preposition:

I had no choice but to take him with me.

A *participle* is a verb used as an adjective.

Running water, grinning faces, opened cans, chilled wine

A *gerund* is a verb used as a noun.

Swimming is good fun. (As subject of a verb)
Nellie is fond of swimming. (As object of preposition)

The Adjective.

An *adjective* is a word that modifies the meaning of a noun or pronoun.

bright sun, tall buildings, coarse sand, rapid typist

The articles *a*, *an*, and *the* may be thought of as special types of adjectives.

Adjectives have three degrees: *positive*, *comparative*, and *superlative*. Positive degree is used in discussing one object or group of objects.

the tall boy, the good brush

Comparative degree is used in comparing two objects.

the taller of the two boys, the better of the two brushes

Superlative degree is used in comparing three objects.

the tallest of all the boys, the best of the three brushes

The Adverb.

An *adverb* is a word that modifies a verb, an adjective, or another adverb.

The swiftly running brook is usually very cold near the bridge.

Adverbs, like adjectives, are of three degrees: *positive*, *comparative*, and *superlative*. The comparative is formed by adding "more" to the positive form; the superlative is formed by adding "most" to the positive form.

quickly, more quickly, most quickly

The Preposition.

The *preposition* is a word that is used to show the relation between a noun or pronoun and another word in the sentence. The word group formed by preposition and noun or pronoun is a *phrase*.

in the house, by the sea, through the night, above the horizon, near the end, to school, at hand, about the subject

When a prepositional phrase modifies a noun or pronoun it is an *adjective phrase*.

The house *near the road* is for rent.

When a prepositional phrase modifies a verb, adjective, or adverb it is an *adverbial phrase*.

We slept *in the open*.

The Conjunction.

A *conjunction* is a word which connects words, phrases, or clauses in a sentence.

and, but, or, either . . . or, as . . . as, yet, nevertheless, because

There are two kinds of conjunctions: *coördinate* and *subordinate*. A *coördinate* conjunction joins two parts of a sentence that are of equal importance.

The flood waters receded *and* the train crawled through to the terminal.

The postman delivered the mail, *but* he brought nothing for Jane.

In these sentences the conjunctions *and* and *but* join two *coördinate* clauses. A *clause* is a group of words having a subject and verb. A *coördinate clause* is a group of words that expresses a complete thought and can, therefore, stand by itself.

A *subordinate* conjunction is one that joins two parts of a sentence that are of unequal importance.

If the picture is over in time, we can visit Mrs. Rollins.

I don't know *why* the newspaper *wasn't* delivered today.

I can't leave *because* I expect Harriet and the baby.

In these sentences the subordinate conjunctions introduce subordinate clauses. A *subordinate clause* is one that depends on another word or clause in the sentence.

The Interjection.

An *interjection* is an exclamatory word or group of words having no relation to any other word in the sentence.

Oh! Ah! Alas! Gosh! For crying out loud! Jeepers!

The Sentence

A *sentence* is a group of words expressing a complete thought. A sentence must have a subject and a predicate verb. There are three types of sentences. The *declarative* sentence makes a statement.

The time passed quickly.

The *interrogatory* sentence asks a question.

Where do we go from here?

The *imperative* sentence issues a command or makes a request.

Open the door, please.

Sentences are also classified according to their clauses. A *simple* sentence has one clause and, therefore, one subject and one predicate.

We had orange juice for breakfast.

A *complex* sentence has one coordinate clause and at least one subordinate clause.

When we get home, I'm going to lie down for a few hours.

A *compound* sentence has two coordinate clauses.

Ed likes the classics, but Henry prefers dance music.

RULES FOR SPELLING

Words of one syllable which end in a single consonant preceded by a single vowel double the final consonant when adding a suffix beginning with a vowel.

sit, *sitting*; *sin*, *sinner*; *man*, *mannish*

Words of more than one syllable which are accented on the final syllable and which end in a single consonant preceded by a single vowel usually double the final consonant when adding a suffix beginning with a vowel.

begin, *beginner*; *remit*, *remitted*; *excel*, *excelled*

Words ending in silent *e* usually drop the *e* before adding a suffix beginning with a vowel.

love, *loving*; *have*, *having*; *stone*, *stony*; *dispute*, *disputatious*

Exceptions to this rule are words ending in *ce* and *ge*. Usually they do not drop the *e* when adding suffixes beginning with certain vowels.

courage, *courageous*; *notice*, *noticeable*; *singe*, *singeing*

Words ending in *y* preceded by one or more consonants change the *y* to *i* before adding suffixes which begin with letters other than *i*.

busy, *business*; *nullify*, *nullification*; *ally*, *allies*; *reply*, *replied*.

In words spelled with *ie* or *ei*, and pronounced *ee* the *i* precedes the *e*, except after *c*.

believe, *niece*, *chief*, *siege*, *receive*, *deceit*, *conceive*.

WORDS FREQUENTLY MISSPELLED

accept (to receive)	advice (noun)	already
except (omitting; to omit)	advise (verb)	altar (of a church)
access (admittance)	affect (to influence)	alter (to change)
excess (greater amount)	effect (to accomplish; result)	altogether
accommodate	aisle (passageway)	analysis
accumulate	isle (island)	analyze
acetic (of vinegar)	alley (narrow passage)	anxiety
ascetic (abstinent)	ally (associate)	apiece
acoustics	allotted	apparent
acquitted	allude (refer)	apprise (to inform)
across	elude (escape)	apprize (to appraise)
adaptation (adjustment)	allusion (reference)	appropriate
adoption (taking)	elusion (evasion)	aquatic
address	illusion (misconcep- tion)	arctic
		arraign
		arrange

arrival	ceiling	dependent
artisan	cemetery	deseendant
ascend	censor (to examine)	desiccate
ascent (rising)	censure (to criticize)	desperate
assent (agreement)	chassis	develop
associate	chimneys	dilcnma
athletic	chord (combination	dined (atc)
attack	of tones)	dinned (made a loud
auger (tool)	cord (string)	noise)
augur (predict)	climaetic (pertaining to	diphtheria
auxiliary	a climax)	disappear
avoidupois	climatic (pertaining	disappoint
	to climate)	dishevel
bachelor	coarse (rough)	dissipate
bare (uncovered)	course (passage)	dual (double)
bear (carry)	collaborate	duel (combat)
baring (uncovering)	column	dyeing (coloring)
barring (excluding)	complement (full quan-	dying (ceasing to live)
bearing (carrying)	tity)	
believe	compliment (polite ex-	cleemosynary
benefited	pression)	elicit (to draw out)
berth (sleeping-place)	complexion	illicit (unlawful)
birth (being born)	conceive	embarrass
bivouac	connoisseur	eminent (outstanding)
bivouacked	consul (government of-	immanent (inherent)
born (brought into exist-	ficial)	imminent (threaten-
ence)	council (group of ad-	ing)
borne (carried)	visers)	enervate
breadth (width)	counsel (advice, or an	envelop (verb)
breath (noun)	adviser)	envelope (noun)
breathe (verb)	consummate	exceed
bridal (wedding)	coral (tiny animal)	excise
bridle (part of a har-	corral (animal enclo-	exhilarate
ness)	sure)	
bruit (to spread rumor)	corduroy	fascinate
brute (without reason)	corps (group of persons)	fiery
buoy	corpse (dead body)	formally (in a formal
		way)
cacophony	correlate	formerly (in time past)
calendar	corroborate	freeze (to harden into
canape (appetizer)	costume (dress)	ice)
canopy (covering)	custom (usage)	frieze (ornamented
cannon (artillery piece)	currant (raisin)	band)
canon (law)	current (circulating)	fuchsia
cantaloupe		fulfill
canvas (cloth)	deceased (dead)	fulsome
canvass (solicit)	diseased (afflicted with	
capital (city)	disease)	gage (pledge)
capitol (state house)	decent (fitting)	gauge (measure)
carriage	descent (downward	gambling (gaming for
catalogue	movement)	money)
catarrh	dissent (disagreement)	gamboling (frolicking)

gases	maintainance	rarefied
genealogy	maneuvers	rarity
gerrymander	mantel (shelf)	receipt
grammar	mantle (garment)	recluse
	marshal (to gather; an official)	recommend
harass	martial (military)	referred
height	material (pertaining to matter)	resin
holey (having holes)	materiel (supplies)	restaurant
holly (tree)	medicine	rhetoric
holy (sacred)	metal (substance)	rhyme
wholly (entirely)	mettle (courage)	rhythm
human	mimicking	sapphire
humane		sarsaparilla
hygiene		satellites
		seize
iced tea	naphtha	sergeant
innuendo	nausea	sheriff
inoculate	necessity	siege
inveigle		sieve
iridescent	occurred	sinecure
irrelevant	oneself	skiing
its (possessive of it)	orient	spontaneity
it's (contraction of it is)		staccato
		stationary (not in motion)
jeopardy	pastime	stationery (writing materials)
	pavilion	
	personal (private)	
lead (metal)	personnel (body of persons engaged in a service)	stiletto
led (guided)		stupefy
lightening	pharmaceutical	subterranean
lightning	portable (capable of being carried)	succotash
likelihood	potable (drinkable)	supersede
literal (according to the letter)	precede	tariff
littoral (pertaining to the shore)	prevalent	therefor (for that)
	principal (chief)	therefore (because of that)
livelihood	principle (rule of action)	tobacco
liveliness	privilege	trafficking
loath (reluctant)	probably	vilify
loathe (detest)	proceed	villain
loose (not tight)	putrefy	yeoman
lose (fail to keep)		
lye		

RULES OF CAPITALIZATION

Capitalize all proper nouns.

Abraham Lincoln, the United States, the Great Lakes, the Middle Ages

Capitalize the first word of every sentence.

Time and tide wait for no man.

Capitalize the first word of every line of poetry.

Ill fares the land, to hastening ills a prey,
Where wealth accumulates, and men decay

Capitalize the first word of a direct quotation.

The district attorney said, "There is no doubt that the prisoner is guilty."

Capitalize the first and other important words of a title.

The Origin of Species, "Ode to the West Wind," *It Happened One Night*

Capitalize honorary titles when they are used with the names of the people who own them.

President Roosevelt, Doctor Johnson, Admiral King, Reverend Williston, Honorable Joseph T. Healy

Capitalize honorary titles which refer to a specific person whose name is not mentioned.

While in London the President conferred with the Prime Minister and the Foreign Secretary.

But,

The British system of choosing a prime minister is different from the American method of electing a president.

Capitalize all words which refer to the Deity.

God, Lord, the Holy Ghost, Son of God, the Omnipotent

RULES OF PUNCTUATION

The Period (.)

Use a period to terminate a sentence which makes a statement.

This is the end of the road.

Use a period after every abbreviation.

U.S., Minn., Dr., B.A.

The Question Mark (?)

Use a question mark to terminate an interrogative sentence.

What time do you expect him?

The Exclamation Point (!)

Use an exclamation point to terminate an exclamatory sentence or after an exclamation within a sentence.

Down with tyranny!
Ouch! that hurt.

The Comma (,)

Use commas to set off words or phrases in series.

She bought eggs, butter, and bread.
He folded the paper carefully, rose from his seat, and tiptoed out of the room.

In punctuating words or phrases in series, the comma preceding the last item may be omitted.

Use commas to set off parenthetical or incidental expressions.

This, I believe, is where the Smiths live.
I may say, as one who has been in this business for twenty years, that this plan is preposterous.

Use commas to set off words in apposition.

Henry, my neighbor's son, is a senior in college.

Use commas to set off a word in direct address.

Roger, put down that jar.
When I get word from the company, Mrs. Williams, I'll get in touch with you.

Use a comma after an introductory expression when the comma will make it easier to read the sentence.

Turning the corner at full speed, the car crashed into the telegraph pole.
If you find out anything about the case be sure to let me know.

Use a comma to set off quoted material from a statement regarding the speaker or writer.

He wrote, "I shall take the ten o'clock train for Westport."

"I shall," he wrote, "take the ten o'clock train for Westport."

"I shall take the ten o'clock train for Westport," he wrote.

The Semicolon (;)

Use a semicolon to separate short clauses that are closely connected in meaning.

This set costs twelve dollars; that one is eleven dollars.

Use a semicolon to separate words or phrases in series when these words or phrases contain commas.

We wrote to Springfield, Ill.; Rochester, N. Y.; and Madison, Wis.

The Colon (:)

Use a colon to introduce an illustration or enumeration of examples.

My plan was this: to surround the enemy, attack from the rear, and force a quick surrender.

Use a colon after the salutation of a formal letter.

Dear Sir:
Gentlemen:

The Dash (—)

Use a dash to show an interruption or to introduce an explanation.

A knife, a bit of string, and a sharpened stone—these were my only weapons.

We passed the Thomas mansion—the house where the wedding had been held—and noticed a strange figure in the third-story window.

The Parenthesis ()

Use parentheses to set off expressions that do not form an essential part of the sentence.

When we telephoned the store we gave our order to Mr. Carlton (Mr. Dean was at lunch) and asked him to deliver by Wednesday noon.

The Apostrophe (')

Use the apostrophe to indicate the omission of letters or figures.

I'm, don't, couldn't, fightin', the class of '37

Use the apostrophe to show possession.

a man's life, books' value, Keats' poems

The Hyphen (-)

Use a hyphen to divide a word at the end of a line and to form compound words.

first-rate, president-elect, pre-Elizabethan, counter-espionage

Quotation Marks (" ")

Use quotation marks around the exact words of a writer or speaker.

"What did you say?" Mrs. Bronson inquired.

Use quotation marks around the title of a book or poem. A title may also be indicated by italics.

I have just finished reading "Hamlet."
I have just finished reading *Hamlet*.

Use single quotation marks (' ') for a quotation within a quotation.

"I thought he said 'Newport is the capital,'" she explained.

WORDS AND PHRASES OFTEN MISUSED

Ability, Capacity. *Ability* refers to developed power, *capacity* to undeveloped power. *He has shown his ability to think. He has never lived up to his capacity for work.*

About. Do not use in place of *almost* or *approximately*.

Accept, Except. *Accept* means to receive; *except* means to omit.

Aggravate. Means *to make worse*. Do not use in place of *annoy*.

Already, All ready. *Already* means *prior to a specified time*. *All ready* means *completely ready*. *He has already been here. We are all ready.*

Alright. This word does not exist. Use *all right*.

Alternative. Use to refer to a choice between two things only.

Angry. Do not confuse with *mad*. Say *I am angry with him*; not *I am mad at him*.

Beside, Besides. *Beside* means *near* or *by*. *Besides* means *in addition to*. *Sit beside me. I have what I need and much more besides*.

Between. Should be used in connection with two persons or things. Do not confuse with *among*. *Between the two colors I prefer green. He is at ease among friends*.

Blame it on. A vulgarism. Say *Do not blame him for it* rather than *Do not blame it on him*.

Bring, Take. *Bring* implies the conveying of something towards the speaker. *Take* implies movement away from the speaker. *Bring the books here. Take them to the library*.

Can, May. *Can* implies power or ability. *May* implies permission. *With my sprained ankle I can't walk to the corner. Ask your mother whether you may visit me*.

Cannot help but. Incorrect. Say *I can but say this is wrong* or *I cannot help saying this is wrong*.

Censor, Censure. *Censor* means *to examine*. *Censure* means *to blame*.

Continual, Continuous. *Continual* refers to something that is frequently repeated. *Continuous* refers to something that goes on without a stop. A stream flows *continuously*, but the ringing of a bell is *continual*.

Could of. Do not use instead of *could have*.

Council, Counsel. *Council* is *a body of people*. *Counsel* means *advice* or *to give advice*.

Couple, Pair. *Couple* refers to things that are united. Do not say *a couple of hours*. *Pair* refers to two things or persons which might be considered together.

Different from. Use this rather than *different to* or *different than*.

Disinterested, Unintersted. *Disinter-*

ested means *impartial*. *Uninterested* means *lacking in interest*. A judge should be *disinterested*, but a person may be *uninterested* in a play.

Done, Finished. *Done* means *performed*. *Finished* means *completed*.

Double negatives. Avoid expressions like *I didn't do nothing*. Say *I did nothing* or *I didn't do anything*.

Each other, One another. *Each other* refers to two people or things. *One another* refers to more than two. *Jane and Catherine like each other. Henry, Carl, and Alfred visit one another frequently*.

Etc. Means *and so forth*. Do not use with *and*. Do not say *I ordered wire, nails, screws, and etc.* In any case, avoid the use of *etc.* when possible.

Every. Is a singular pronoun. *Every man has his uniform* (not *their uniform*).

Few, A few. *Few* refers to a limited number. *A few* means several. *John has few friends* means that John has hardly any friends. *John has a few friends* means that John has a number of friends.

Firstly. Use *first*, instead.

Fix. Means *to fasten firmly*. Do not use *to mean to arrange* or *repair*.

Former, Latter. Refer only to two things or people.

Healthy, Healthful. *Healthy* means *in good health*. *Healthful* means *imparting health*. A person is *healthy*. Milk, vegetables, and a good climate are *healthful*.

Hanged, Hung. *Hanged* refers to death by hanging. Say *The prisoner was hanged*. For other uses say *hung*. In back of. Say, rather, *behind*.

Ingenious, Ingenuous. *Ingenious* means *clever* or *resourceful*. *Ingenuous* means *frank* or *open*.

It's. Means *it is*. Do not confuse with *its*, the possessive of *it*.

Kind of a. Eliminate the *a*.

Learn, Teach. *Learn* means *to receive instruction*. *Teach* means *to give instruction*.

Leave, Let. *Leave* means to depart or to abandon. *Let* means to allow.

Lend, Loan. *Lend* is a verb. *Loan* is a noun. When you *lend* a man money he receives a *loan*.

Lie, Lay. *Lie* means to rest or recline. *Lay* means to place or put. The principal parts of each of the two verbs are:

PRESENT	PAST	PAST PARTICIPLE
<i>lie</i>	<i>lay</i>	<i>lain</i>
<i>lay</i>	<i>laid</i>	<i>laid</i>

Now I lie on the couch. Yesterday I lay on the hammock. I have lain here for an hour.

Now I lay the pen on the table. Yesterday I laid the book on the shelf. I have laid the eggs in the same bowl since we moved in.

Like, As. *Like* is a preposition. *As* is a conjunction. Do it like I do is incorrect. Do it like me or Do it as I do are correct.

Most, Almost. Are not interchangeable. Do not say *Most any one can do that*.

Neither . . . nor, Not . . . or. *Neither* must always accompany *nor*. When using *not* do not use *nor*. *Neither he nor I was there. I did not find the letter or ask your mother where it is.*

Nice. Does not mean agreeable. It means delicate, discriminating, precise. Say *There is a nice difference between the two words*. Do not say *I had a nice time at the party*.

Off of. *Of* is unnecessary in an expression like *I took it off of the shelf*.

Party. Do not use instead of *person*. Avoid *I recommended that party to your office*.

Practical, Practicable. *Practical* means usable, useful, having to do with action. It is opposed to the idea of theoretical, ideal, or speculative. *Practicable* applies only to objects, plans, etc. It is not applied to persons. A

man may have a practical turn of mind in that he is interested in making money, but his plans may not be practicable.

Principal, Principle. *Principal* means chief or main as an adjective or a leader or a sum placed at interest as a noun. *Principle* means a guiding rule or a fundamental truth. *Principal actor, principal of the school, scientific principles*.

Provided, Providing. *He promised to continue provided (not providing) we raise his salary*.

Reverend. As a title, must be used with the and Dr. or Mr. *The Reverend Dr. Williams*.

Sit, Set. *Sit* means to be in, or to change to, a sitting position. *Set* means to place. *The hen sits on the fence. I set the hen on the ground*.

Somewheres. Eliminate the *s*.

Species, Specie. *Species* is both singular and plural and means a group of plants or animals. *Specie* means money in the shape of coin.

That there. Eliminate *there* in such a sentence as *I don't know that there man*.

Them. Is not a demonstrative pronoun. Use *those* in its place in the sentence *I bought them shirts at a sale*.

These kind, Those kind. Both of these are wrong. *Kind* is singular in number and so must take a singular modifier: *This kind, that kind*. Or, we may change *kind* to the plural and say: *these kinds, those kinds*.

Transpire. Means to leak out or to become known. Does not mean to happen. *The accident transpired at Corn and Bleeker Streets* is incorrect. *Would of*. Do not use for *would have*.

WORDS FREQUENTLY MISPRONOUNCED

Key to Pronunciation. ā, as in fate; ǎ, as in fat; á, as in fare; a, as in comma and normal; ah, as in father; aw, as in call; ē, as in bead; ě, as in bet; é, as in mere and sphere; e, as in dozen and river; ĭ, as in file; ĭ, as in sit; ĩ, as in habit and satin; ō, as in note; ō, as in hot; ô, as in north; o, as in actor and random; ōō, as in soon and food; ōō, as in good, wool; oi, as in toil; ow, as in now; ū, as in cue, union; ŭ, as in cut; ŭ, as in cur and turn; u, as in lettuce and circus; ū, as in picture; ŭ, as in talcum; n, as in the French words bien and bon; th, as in thin; th, as in this; zh, like the z in azure and the s in vision. The accent mark (ˈ) follows the syllable which receives the primary stress. The accent mark (ˈ) indicates secondary stress.

abdomen ăb-dŏ'-mĕn or ăb'-do-men

absolutely ăb'-so-lyŭt-lĭ

absorb ăb-sŏrb'

acclimate a-kli'-mit

acoustic a-kŏŏs'-tĭk or a-kows'-tĭk

acumen a-kyŭ'-mĕn

address ăd'-ij

address a-drĕs'

admirable ăd'-mĭ-rab'l

adobe a-dŏ'-bĭ

adult ă-dŭlt'

adumbrate ăd-ŭm'-brăt

adversary ăd'-vŭr-sĕ'-rĭ

advertisement ăd-vŭr'-tiz-ment or
ăd"-vŭr-tiz'-ment

aerial ă-ĕr'-ĭ-al or ăr'-ĭ-al

afflatus a-flă'-tŭs

again a-gĕn'

aged ă'-jĕd (old)

ăjd (of a certain age)

aggrandizement a-grăn'-diz-ment

agile ăj'-il

ague, ă'-gyŭ

albeit awl-bĕ'-ĭt

albino ăl-bĭ'-nŏ

alias ă'-lĭ-as

allied a-lĭd'

alloy a-loi'

alma mater ăl'-ma mă'tŭr

almond al'-mŭnd

alternate verb: awl'-tŭr-năt or
ăl'tŭr-năt

adjective: awl'-tŭr-nŭt

or ăl'-tŭr-nŭt

alumna a-lŭm'-na

alumnae a-lŭm'-nĕ

alumni a-lŭm'-nĭ

amenable a-mĕn'-a-b'l

ancillary ăn'-sĭ-lĕr"-ĭ

anesthetist ăn-ĕs'-thĭ-tĭst

annex verb: a-nĕks'

noun: ăn'nĕks or a-nĕks'

anomalous a-nŏm'-a-lŭs

antipodes ăn-tĭp'-o-dĕz

apathy ăp'-a-thĭ

apostasy a-pŏs'-ta-sĭ

apotheosis ăp'-o-thĕ'-o-sĭs or
a-pŏth"-ĭ-ŏ'-sĭs

applicable ăp'-lĭ-ka-b'l

appreciation a-pre"-shĭ-ă'-shun

apropos ăp'-ro-pŏ'

archangel ahrk'-ăn'-jel

archipelago ahr"-kĭ-pĕl'-a-gŏ

arctic ahrk'-tĭk

arraign a-răn'

athletic ăth-lĕt'-ĭk

atrophy ăt'-ro-fĭ

attribute verb: a-trĭb'-yŭt

noun: ăt'-ri-byŭt

autobiography aw"-to-bĭ-ŏg'-ra-fĭ

autogyro aw"-to-jĭ-rŏ

aviator ă'-vĭ-ă"-tŏr

awry a-rĭ'

aye, ay ă (always)

ĭ (yes)

bade băd

banal bă'-nal

banquet băng'-kwĕt

bas-relief bah"-ri-lĕf'

bass bās (musical term)

bās (fish)

because bi-kawz'

bestial bĕst'-yal

bitumen bĭ-tyŭ'-men

bivouac bĭv'ŏŏ-ăk or bĭv'-wăk

blackguard blăg'-ahrd

blasé blah-zā'
 blaspheme blās-fēm'
 blasphemy blās'-fi-mī
 bouillon bōō'-yōn or bōōl'-yūn
 bouquet bōō-kā'
 bourgeoisie bōōr"-zhwah"-zē'
 bow bow (to bend or yield)
 bow (forward part of ship)
 bō (anything bent or curved)
 bravado bra-vah'-dō
 breeches brīch'-īz
 bric-a-brac brīk'-a-brāk"
 brigand brīg'-and
 brochure brō-shōōr'
 brooch brōch or brōōch
 buffet bōō-fā' (sideboard)
 būf'-et (a blow)
 bullion bōōl'-yon
 bulwark bōōl'-wūrk
 cache kāsh
 caldron kawl'drun
 calumny kāl'-um-nī
 candelabra kan"-dī-lah'-bra
 canon kăn'-yun (valley)
 kăn'-ūn (law)
 caries kâ'-rī-ēz
 cello chēl'-ō
 centenary sēn'-ti-nēr"-ī or
 sēn-tēn'-a-rī
 ceramics sē-rām'-īks
 cerebral sēr'-ē-bral
 chafe chāf
 chameleon ka-mē'-lē-un or
 ka-mēl'-yun
 chamois shām'-ī
 chancre shāng'-kur
 charade sha-rād' or sha-rahd'
 charlatan shahr'-la-tan
 chasm kāzm
 chassis shās'-ī or shās'-is
 chaste chāst
 chastisement chās'-tiz-ment
 cheroot she-rōōt'
 chimera kī-mē'-ra or kī-mē'-ra
 chiropodist kī-rōp'-o-dist
 chocolate chōk'-o-lit
 choler kōl'-er
 chorus kō'-rus
 cinema sīn'-i-ma
 clandestine klān-dēs'-tīn
 clientele klī"-en-tēl'

clique klēk
 clothes klōthz
 cloths klōthz or klōths
 coalesce kō"-a-lēs'
 codicil kōd'-i-sil
 cognizant kōg'-nī-zant
 coiffure kwah-fyūr'
 colloquial ko-lō'-kwī-al
 colonel kūr'-nel
 columnist kōl'-um-ist or kōl'-um-nist
 combatant kōm'-ba-tant or
 kūm'-ba-tant
 comely kūm'-lī
 communal kōm'-yū-nal or
 ko-myū'-nal
 comparable kōm'-pa-ra-b'l
 complacent kōm-plā'-sent
 complaisant kom-plā'-zant or
 kōm'-plā-zānt"
 comptroller kōn-trōl'-er
 concerto kōn-chēr'-tō
 condign kōn-dīn'
 confidant kōn-fi-dahnt' or
 kōn-fi-dant"
 congeries kōn-jēr'-ī-ēz
 conjugal kōn'-jōō-gal
 connoisseur kōn"-i-sūr'
 consultative kōn-sul'-ta-tīv
 consummate adj.: kon-sūm'-it
 verb: kōn'-su-māt
 contest noun: kōn'-tēst
 verb: kon-tēst'
 contestant kon-tēs'-tant
 contumely kōn'-tyū-mē"-lī
 cornucopia kōr"-nyū-kō'-pī-a
 corporeal kōr-pō'-rē-al
 coup kōō
 coupon kōō'-pōn
 courtier kōr'-tī-er
 covey kūv'-ī
 coyote kī'ōt or kī-ō'-tī
 creek krēk
 crescendo kre-shēn'-dō or -sēn'-dō
 crevasse krē-vās'
 crevice krēv'-is
 cuisine kwē-zēn'
 culinary kyū'-lī-nēr"-ī
 cupboard kūb'-erd
 curator kyū-rā'-ter
 dachshund dahks'-hōōnt" or
 dāsh'-hünd"

- dais dā'-is or dās
 data dā'-ta or dah'-ta
 deaf dēf
 debris dē-brē' or dēb'-rē
 debut dā-byū' or dē-byū'
 debutante dēb"-yū-tahnt'
 decolleté dā-köl'-tā
 decorum dī-kō'-rum
 deficit dēf'-i-sīt
 demoniac de-mō'-nī-āk
 demoniacal dē"-mo-nī'-a-kal
 denouement dā-nōō'-mawN
 depot dē'-pō or dēp'-ō
 derisive dī-rī'-siv
 deshhabille dēz"-a-bēl'
 despicable dēs'-pī-ka-b'l
 desultory dēs'-ul-tō"-rī
 diabetes dī"-a-bē'-tēz
 dilettante dīl"-e-tān'-tī
 diminution dīm"-i-nyū'-shun
 dingy dīn'-jī
 direct dī-rēkt' or dī-rēkt'
 dirigible dīr'-i-jī-b'l
 discern dī-zūrn' or dī-sūrn'
 dishevel dī-shēv'-el
 disputant dīs'-pyū-tant
 divers dī'-verz
 diverse dī-vūrs' or dī'-vūrs
 or dī-vūrs'
 drolorous dōl'-er-us or dō'-ler-us
 donkey dōng'-kī
 dour dōōr
 draught drāft
 drought drowt
 ducat dūk'-at
 duress dyū'-rēs
 eclat ā-klah'
 eclectic ēk-lēk'-tīk
 eczema ēk'-zī-ma or ēk'-sī-ma
 eighth āt'th
 eleemosynary ēl'-i-mōs'-i-nēr"-ī or
 ēl'-i-ē-mōz'-i-nēr"-ī
 elite ā-lēt'
 elixir i-līk'-ser
 emaciate i-mā'-shī-āt
 encore ahng-kōr' or ahng'-kōr
 en route ahn-rōōt'
 ensemble ahn-sōm'-b'l
 entente ahn-tahnt'
 entree ahn'-trā
 epaulet ēp'-o-lēt
 epistle i-pīs'-l
 epitome i-pīt'-o-mē
 ere ār
 err ūr
 eschew ēs-choō' or ēs-chyū'
 et cetera ēt sēt'-er-a
 evidently ēv'-i-dēnt-lī
 exigency ēk'-sī-jēn-sī
 extant ēks'-tant or ēk-stānt'
 facet fās'-ēt
 faucet fav'sēt
 fecund fē'-kūnd or fēk'-ūnd
 fête fāt
 fiancé fē"-ahn-sā' or fi-ahn'-sā
 finis fī'-nis
 flaccid flāk'sīd
 forbear fōr-bār'
 forebear fōr'-bār
 forehead fōr'-ēd
 funereal fyū-nēr'-i-al
 fungi fūn'-jī
 fungus fūng'-gūz
 gallant verb: ga-lānt';
 adj. and noun: gāl'-ant
 or ga-lānt'
 gaol jāl
 gauge gāj
 genealogy jēn"-i-āl'-o-jī
 genuine jēn'-yū-in
 gesticulate jēs-tīk'-yu-lāt
 gesture jēs'-tyūr
 geyser gī'-zer or gī'-ser
 gist jīst
 glazier glā'-zher
 gondola gōn'-do-la
 gosling gōz'-līng
 government gūv'-ern-ment
 gyroplane jī'-ro-plān"
 harbinger hahr'-bīn-ger
 hantboy hō'-boi or ō'-boi
 hearth hahrth
 hegemony he-jēm'-o-nī or
 hēj'-e-nō"-nī
 heifer hēf'-er
 heinous hā'-nūs
 herb ūrb or hūrb
 heresy hēr'-e-sī
 hiatus hī-ā'-tūs
 hiccongh hīk'-ūp
 hierarchy hī'-er-ahr"-kī
 homage hōm'-ij or ōm'-ij

horizon ho-rī'-z'n
 hospitable hōs'-pī-ta-b'l
 hussar hōō-zahr'
 hyperbole hī-pūr'-bo-lē
 idea ī-dē'-a
 idiosyncrasy īd''-ī-o-sīng'-kra-sī
 ignominy īg'no-mīn-ī
 ignoramus īg''-no-rā'-mūs
 impiety īm-pī'-e-tī
 impious īm'-pī-us
 impostor īm-pōs'-ter
 impugn īm-pyūn'
 incognito īn-kōg'-nītō
 incomparable īn-kōm'-pa-ra-b'l
 indict īn-dīt'
 indigenous īn-dīj'-i-nūs
 inebriety īn-i-brī'-e-tī
 inexorable īn-ēk'-so-ra-b'l
 ingenious īn-jēn'-yūs
 ingenuous īn-jēn'-yū-ūs
 integral īn'-tī-gral
 intestate īn-tēs'-tāt
 intrepid īn-trēp'-īd
 inundate īn'-un-dāt
 inveigh īn-vā'
 inviolate īn-vī'-o-lāt
 irate ī'rāt or ī-rāt'
 iron ī'-ern
 irreparable ī-rēp'-a-ra-b'l
 irrevocable ī-rēv'-o-ka-b'l
 jocose jo-kōs'
 jocund jōk'-ūnd or jō'-kūnd
 joust jūst or jōost
 khaki kah'-kī
 lamentable lām'-en-ta-b'l
 lath lāth
 lathe lāth
 lenity lēn'-i-tī
 lethal lē'thal
 licorice līk'-o-rīs
 lineage līn'-i-īj
 livelong līv'-lōng''
 loath lōth
 loathe lōth
 locale lō-kāl'
 longevity lōn--jēv'-i-tī
 long-lived lōng'-līvd'
 machination māk''-ī-nā'-shūn
 maelstrom māl'-strom
 magneto mäg-nē'-tō
 malign ma-līn'

malingerer ma-līng'-ger-er
 mange māj
 manger māj'er
 mankind māj''kīnd'
 marital māj'-i-tal or ma-rī'-tal
 martial māj'-shal
 massacre mās'-a-ker
 matériel ma-tēr''-ī-el'
 mausoleum maw-so-lē'-ūm
 mauve mōv
 medicinal me-dīs'-i-nal
 memoir mēm'-wahr or mēm'-wōr
 meringue me-rāng'
 mesa mā'-sa
 mien mēn
 mineralogy mīn''-er-āl'-o-jī
 miscegenation mīs''-i-jī-nā'-shūn
 miscellany mīs'-e-lā''-nī or
 mīs'-e-la''-nī
 mnemonics nī-mōn'-īks
 modiste mo-dēst'
 monsieur me-syū'
 moral mōr'-al
 morale mo-rāl' or mo-rah'l
 municipal myū-nīs'-i-pal
 museum myū-zē'-um
 musicale myū''-zī-kāl'
 naïve nah-ēv'
 naphtha nāj'-tha
 niche nīch
 orchestra ōr'-kēs-tra
 orgies ōr'-jīz
 otiose ō'-shī-ōs
 palsy pawl'-zī
 panacea pāj''-a-sē'-a
 pathos pāj'-thōs
 pecan pī-kāj' or pī-kahn'
 penalize pē'-nal-īz
 personnel pūr''-so-nēl'
 perspiration pūr-spī-rā'-shūn
 pharynx fāj'-īngks
 philately fī-lāt'-e-lī
 pique pēk
 plaque plāk or plahk
 plebeian plī-bē'-yan
 positively pōz'-i-tīv-lī
 posse pōs'-ē
 precedence prē-sēd'-ens
 preferable prēf'-er-a-b'l
 prophecy prōf'-e-sī
 prophesy prōf-e-sī
 psychiatry sī-kī'-a-trī

puerile pyū'-er-īl
 pulmonary pūl'-mo-nēr-i
 quay kē
 radio rā'-dī-ō
 rancid rān'-sīd
 rapine rāp'-īn
 recipe rēs'-i-pē
 reconnaissance re-kōn'-i-sans
 reconnoiter rēk'-o-noi'-ter
 redolent rēd'-o-lent
 referable rēf'-er-a-b'l
 remediable re-mē'-dī-a-b'l
 remonstrate re-mōn'-strāt
 reparable rēp'-a-ra-b'l
 resources re-sōr'-sēz or
 rē'-sōr-sez
 respite rēs'-pīt
 revocable rēv'-o-ka-b'l
 ribald rīb'-ald
 robot rō'-bot or rōb'-ot
 rout rowt
 saline sā'-līn
 schedule skēd'-yūl
 schism sīz'm
 scion sī'-ūn
 scythe sīth
 secretive se-krē'-tīv

semester se-mēs'-ter
 sidereal sī-dēr'-e-al
 sieve sīv
 simile sīm'-īlē
 sleight slit
 solder sōd'-er
 soviet sō'-vī-ēt or sō-vī-ēt'
 stalwart stahl'-wert
 status stā'-tūs
 subtle sūt'l
 suite swēt
 superfluous syū-pūr'-flōō-ūs
 swastika swās'-tī-ka or swahs'-tī-ka
 swath swahth
 swathe swāth
 sycophant sīk'-o-fant
 syringe sīr'-īnj
 theater thē'-a-ter
 ultimatum ūl'-tī-mā'-tūm
 usurp yū-zūrp'
 vehicle vē'-i-k'l or vē'-hī-k'l
 victuals vīt'lz
 viscount vī'-kownt
 vitals vī'-talz
 with wīth
 yeoman yō'-man
 zoology zō-ōl'-o-jī

FAMILIAR FOREIGN WORDS AND PHRASES

Key to abbreviations. F.—French; L.—Latin; Ger.—German; It.—Italian.

à bas. (F.) Down with.
 à cheval. (F.) On horseback.
 ad astra per aspera. (L.) To the stars
 by hard ways.
 ad infinitum. (L.) To infinity.
 ad interim. (L.) In the meanwhile.
 ad valorem. (L.) On the basis of value.
 affaire d'honneur. (F.) An affair of
 honor; a duel.
 agent provocateur. (F.) One employed
 to associate with members of a
 group to lead them to commit un-
 lawful acts.
 aide-de-camp. (F.) An officer as-
 signed to a general to assist him in
 the details of his work.
 à la carte. (F.) By the bill of fare; a
 stated price for each dish.
 à la mode. (F.) Fashionable.

amicus curiae. (L.) A friend of the
 court.
 annus mirabilis. (L.) Wonderful year.
 a priori. (L.) In logic, that kind of
 reasoning which deduces conse-
 quences from assumptions which are
 regarded as self-evident.
 argot. (F.) The conventional slang of
 a group, especially of thieves.
 ars longa, vita brevis. (L.) Art is long,
 life is short.
 atelier. (F.) A workshop or studio.
 au contraire. (F.) On the contrary.
 au courant. (F.) Well-informed.
 au naturel. (F.) Naturally; in the
 nude; cooked simply.
 au revoir. (F.) Good-by until we meet
 again.

auf Wiedersehen. (Ger.) Good-by until we meet again.

belles lettres. (F.) Literature of esthetic value, as opposed to utilitarian literature.

bête noire. (F.) A person or object of fear or aversion.

bijou. (F.) A jewel.

billet doux. (F.) A love letter.

bona fide. (L.) Genuine.

bon mot. (F.) An adroit expression; a witty expression.

bon vivant. (F.) A lover of good living; a gourmet.

bon voyage. (F.) A good journey.

carpe diem. (L.) Enjoy the day; take the present opportunity.

caveat. (L.) A warning.

cause célèbre. (F.) A legal case that excites great interest.

cherchez la femme. (F.) Look for the woman.

coup de grâce. (F.) A decisive, finishing stroke.

coup d'état. (F.) A sudden move that overthrows the existing government.

cul de sac. (F.) A blind alley.

de facto. (L.) Actually, in fact.

de jure. (L.) By right, by a lawful title.

Deo volente. (L.) God willing.

Deus ex machina. (L.) God out of the machine.

discur, diseuse. (F.) A professional reciter.

dolce far niente. (It.) It is sweet to do nothing.

ecce homo. (L.) Behold the man.

élan. (F.) Spirit, verve.

élan vital. (F.) Vital force.

embonpoint. (F.) Plumpness.

entente cordiale. (F.) A cordial understanding, especially between governments.

esprit de corps. (F.) Common spirit pervading members of a group.

ersatz. (Ger.) Substitute.

ex officio. (L.) By virtue of the office.

ex parte. (L.) In the interest of one side only.

faux pas. (F.) A false step.

fiat lux. (L.) Let there be light.

garçon. (F.) Waiter.

habeas corpus. (L.) A writ inquiring into the propriety of maintaining a person in custody.

haut monde. (F.) High society.

hors de combat. (F.) Out of the combat; disabled from fighting.

hors d'oeuvres. (F.) A relish or appetizer.

idée fixe. (F.) A dominating, fixed idea.

id est. (L.) That is.

ipso facto. (L.) By the fact itself; by the very nature of the case.

joie de vivre. (F.) Joy of living.

mandamus. (L.) A writ issued to enforce the performance of a public duty.

mardi gras. (F.) Shrove Tuesday.

memento mori. (L.) An object used as a reminder of death.

mirabile dictu. (L.) Wonderful to relate.

mise en scène. (F.) Scenery, setting.

mot juste. (F.) The exactly right word.

moyen âge. (F.) The Middle Ages.

nisi prius. (L.) Literally, unless before; used of certain writs and trials.

noblesse oblige. (F.) The obligation of generous behavior associated with high rank or birth.

nocturne. (F.) A composition dealing with or referring to night.

nuncio. (It.) A representative of the Pope at a foreign court.

non sequitur. (L.) A conclusion that does not follow from the premises.

O tempora! O mores! (L.) O times! O customs!

outré. (F.) Extravagant, bizarre.

par excellence. (F.) Pre-eminently.
 pari passu. (L.) With an equal pace;
 in an equal proportion.
 pâté de foie gras. (F.) A paste of fat-
 tened goose liver and truffles.
 patois. (F.) A dialect.
 pièce de résistance. (F.) The main
 article of a series.
 prima donna. (It.) The principal
 woman singer.
 prima facie. (L.) On first appearance.
 pro tempore. (L.) For the time being.
 qui vive. (F.) On the alert.

raison d'être. (F.) Justification for ex-
 istence.

sang-froid. (F.) Coolness in trying
 circumstances.

savoir faire. (F.) Readiness in doing
 or saying the proper or graceful
 thing.

sine die. (L.) Without appointing a
 day on which to assemble again.

sine qua non. (L.) An indispensable
 thing or condition.

sotto voce. (It.) In an undertone;
 privately.

status quo. (L.) The existing state.

table d'hôte. (F.) A common table; a
 meal at a fixed price.

tête-à-tête. (F.) Confidential, intimate.

vice versa. (L.) The relations being
 reversed.

viva voce. (L.) By word of mouth;
 orally.

Wanderlust. (Ger.) Strong impulse
 toward wandering.

Weltanschauung. (Ger.) A philosophy
 that explains the world as a whole.

Weltschmerz. (Ger.) Sorrow or sad-
 ness resulting from a pessimistic
 outlook on the world.

Zeitgeist. (Ger.) The spirit of the
 time.

ABBREVIATIONS

A.A.F. Army Air Force

A.B. Bachelor of Arts

A.D. Anno Domini

adv. Advertisement

A.E.F. American Expeditionary
 Forces

A.F. of L. American Federation of
 Labor

Ala. Alabama

A.M.A. American Medical Associ-
 ation

A.M. Master of Arts

A.M. ante meridiem (before noon)

anon. anonymous

A.P. Associated Press

A.R.C. American Red Cross

Ariz. Arizona

Ark. Arkansas

a.v. ad valorem

B.A. Bachelor of Arts

B.B.C. British Broadcasting Corpora-
 tion

B.C. Before Christ

B.D. Bachelor of Divinity

B.P.O.E. Benevolent and Protective
 Order of Elks

bldg. building

Bro. Brother

bu. bushel

B.V. Blessed Virgin

C. cent; centigrade; centime; hun-
 dred

C.A.A. Civil Aeronautics Authority

cal. calendar

Cal., Calif. California

Cap. capital; chapter

C.B.S. Columbia Broadcasting Sys-
 tem

Cent. hundred; centigrade

cf. compare

C.I.O. Congress of Industrial Or-
 ganizations

cm. centimeter

Co. Company

C.O.D. cash on delivery
 C. of C. Chamber of Commerce
 Col. Colonel
 Colloq. Colloquial, colloquialism
 con. against
 Conj. conjunction
 Conn. Connecticut
 C.P.A. Certified Public Accountant
 cu. cubic

d. penny; pence
 d. died, daughter
 D.A.R. Daughters of the American Revolution
 D.C. District of Columbia
 D.D. Doctor of Divinity
 D.D.S. Doctor of Dental Surgery
 Del. Delaware
 Dem. Democrat
 Dept. Department
 Dis., disct. discount
 D.Lit., D.Litt. Doctor of Literature
 do. ditto
 doz. dozen
 Dr. Doctor; debtor
 D.S.M. Distinguished Service Medal
 D.S.O. Distinguished Service Order
 duo., 12 mo. duodecimo (twelve folds)

ea. each
 Ed. Editor; edition; Edinburgh
 e.g. for example
 Eliz. Elizabeth, Elizabethan
 Epiph. Epiphany
 Esq. Esquire
 et al. and others; and elsewhere
 etc. et cetera

F. Fellow; Fahrenheit
 f. farthing; folio; feminine; franc
 Fahr. Fahrenheit
 F.B.I. Federal Bureau of Investigation
 F.C.C. Federal Communications Commission
 F.D.I.C. Federal Deposit Insurance Corporation
 F.F.V. First Families of Virginia
 F.H.A. Federal Housing Administration
 Fig. Figure; figurative

Fl. Flemish; florin; flourished
 Fla. Florida
 f.o.b. free on board
 ft. foot
 F.T.C. Federal Trade Commission
 fth. fathom
 fur. furlong

Ga. Georgia
 gal., gall. gallon
 G.A.R. Grand Army of the Republic
 Gen. General; Genesis; genitive
 Geol. Geology
 G.H.Q. General Headquarters
 gm. gram
 G.O.P. Grand Old Party
 Gov. Governor; government
 Govt. Government
 Gr. Grain; great; Greek; gross

H.C. House of Commons
 H.H. His (or Her) Highness; His Holiness
 h.j. hic jacet (here lies)
 H.M.S. His (or Her) Majesty's ship, steamer, or service
 h.p. horsepower

I., Is. Island
 Ia. Iowa
 Ib., ibid. Ibidem (in the same place)
 I.C.C. Interstate Commerce Commission
 Id. Idem (the same)
 Ida. Idaho
 i.e. id est (that is)
 Ill. Illinois

I.L.O. International Labor Organization
 Imp. Imperial; emperor; impersonal
 in. inch
 Inc. Incorporated
 in re. in regard to
 I.N.S. International News Service
 Int. Interest
 I.O.O.F. Independent Order of Odd Fellows
 I.O.U. I owe you
 I.Q. Intelligence Quotient
 I.W.W. International Workers of the World
 Jno. John

- k. karat
 Kans., Kan. Kansas
 K.C. Knights of Columbus; King's Counsel
 kg. kilogram
 km. kilometer
 K. of P. Knights of Pythias
 kw. kilowatt
 Ky. Kentucky
 L., l., lb. Pound (sterling), pound weight
 La. Louisiana
 l.c. lower case
 l/c. letter of credit
 l.c. loc. cit. In the passage cited
 Lieut., Lt. Lieutenant
 LL.B. Bachelor of Laws
 LL.D. Doctor of Laws
 LL.M. Master of Laws
 Lon., Long. Longitude
 L.S. Locus sigilli (Place of the seal)
 Ltd. Limited
 Luth. Lutheran
 m. married; masculine; meter
 M. Monsieur; Marquis
 M. Thousand
 M.A. Master of Arts
 Mass. Massachusetts
 M.C. Member of Congress; master of ceremonies
 Md. Maryland
 Me. Maine
 Messrs., MM. Gentlemen
 Mfrs. Manufacturers
 Minn. Minnesota
 Miss. Mississippi
 Mo. Missouri; month
 Mont. Montana
 M.P. Member of Parliament; Military Police
 Mr. Mister; Master
 Mrs. Mistress
 ms. manuscript
 Mt. Mount, mountain
 M.S. Master of Science
 N.A.M. National Association of Manufacturers
 N.B. Nota bene (Note well; take notice)
 N.B.C. National Broadcasting Company
 N.C. North Carolina
 N. Dak., N.D. North Dakota
 Neb., Nebr. Nebraska
 Nev. Nevada
 N.H. New Hampshire
 N.J. New Jersey
 N.L.R.B. National Labor Relations Board
 N. Mex., N.M. New Mexico
 non-com. non-commissioned officer
 N.P. Notary public
 N.Y. New York
 O. Ohio
 Oct., 8vo Octavo
 O.K. All correct
 Okla. Oklahoma
 Oreg., Ore. Oregon
 O.S. Old Style
 Oxon. Oxford; of Oxford
 oz. ounce
 Pd. Paid
 P.E. Protestant Episcopal
 per cent. by the hundred
 Pfd. Preferred
 Ph.D. Doctor of Philosophy
 P.I. Philippine Islands
 p.m. Post meridiem (Afternoon)
 P.M. Postmaster; past master
 P.O. Post office
 Pp. Pages
 Pres. President
 Prof. Professor
 Pro tem. Pro tempore (For the time being)
 Q., Qy. Query
 q.e. quod est (which is)
 Q.E.D. Quod erat demonstrandum (Which was to be proved)
 Qt. Quart
 q.v. quod vide (which see)
 R. Réaumur; river
 R.C. Roman Catholic
 Rep., Repub. Republican
 Rev. Reverend
 R.F.C. Reconstruction Finance Corporation

R.F.D. Rural Free Delivery
 R.I. Rhode Island
 R.I.P. Rest in peace
 R.O.T.C. Reserve Officers' Training Corps
 R.R. Railroad
 R.S.V.P. Répondez, s'il vous plaît
 (Please reply)
 Rt. Hon. Right Honorable
 S.C. South Carolina
 Sc.D. Doctor of Science
 S.D., S. Dak. South Dakota
 S.E.C. Securities and Exchange Commission
 Sec. Second; secretary
 Sen. Senate; senator
 S.P.C.A. Society for the Prevention of Cruelty to Animals
 sp. gr. specific gravity
 Sq. Square
 Sr. Senior
 St. Saint; street
 S.S. Steamship
 Str. Steamer
 Supt. Superintendent
 Tenn. Tennessee
 Tex. Texas
 T.N.T. Trinitrotoluene
 T.V.A. Tennessee Valley Authority

u.c. upper case
 U.P. United Press
 U.S.A. United States of America;
 United States Army
 U.S.M.A. United States Military Academy
 U.S.N. United States Navy
 U.S.N.A. United States Naval Academy
 U.S.S. United States Ship
 U.S.S.R. Union of Soviet Socialist Republics
 Va. Virginia
 Visc. Viscount
 vs., v. against
 Vt. Vermont
 Wis. Wisconsin
 Wt. Weight
 W. Va. West Virginia
 Wyo. Wyoming
 yd. yard
 Y.M.C.A. Young Men's Christian Association
 Y.M.H.A. Young Men's Hebrew Association
 Y.W.C.A. Young Women's Christian Association
 yr. year

LETTER FORMS

Business Letters

The Heading.

This gives the address of the sender and is usually printed on the letter-head. If it is not printed, it should be written in the upper-right hand part of the page, as follows:

18 East 48 Street
 New York 17, N. Y.
 March 12, 19—

or

18 East 48 Street
 New York 17, N. Y.
 March 12, 19—

The Inside Address.

This gives the name and address of the person or firm to whom the letter

is written. It should be placed one or two lines below the heading and at the left of the page, as follows:

Jones and Wilcox
 976 Mason Street
 Caryville, Ill.

or

Jones and Wilcox
 976 Mason Street
 Caryville, Ill.

or

Elmer T. Wilcox
 President, Jones and Wilcox
 976 Mason Street
 Caryville, Ill.

Punctuation after each line of the heading and inside address may be used. If so, commas should follow the first two lines and a period should fol-

low the third line. If end punctuation is used in the heading, it must also be used in the inside address.

The Salutation.

The salutation is written directly under, with a blank line space, the inside address. In writing to a company use:

Gentlemen:

or

Dear Sirs:

In addressing an individual use:

Dear Sir:

or

Dear Mr. Wilcox:

or

My dear Mr. Wilcox:

In addressing a woman use:

Dear Madam:

or

Dear Mrs. Smith:

The Body.

Leave a blank line after the salutation and begin the body of the letter about a half inch from the left-hand margin. If typewriting single-space, an extra space should be left between paragraphs.

The Complimentary Close.

This should be written from two to four lines after the end of the body and should begin about halfway across the sheet.

Acceptable closings are:

Yours truly,

Very truly yours,

Yours sincerely,

Very sincerely yours,

Respectfully yours,

The Signature.

Skip two lines after the closing and write the signature. Some acceptable forms are:

Yours truly,

George T. White (written in pen)

George T. White

Yours truly,

Ajax Corporation

George T. White (written in pen)

President

Yours truly,

Ajax Corporation

By Elmer Wright (written in pen)

Social Letters

The form of the social letter is less rigid than that of the business letter. The heading is the same, but there is no inside address. The salutation is generally one of the following:

My dear Mrs. Kendall,

Dear Edna,

My dear Edna,

The body takes the same form as in the business letter.

The choice of the complimentary closing will depend on the purpose of the letter and on how well the writer knows the person to whom the letter is addressed. Some acceptable complimentary closings are:

Sincerely,

Sincerely yours,

Very truly yours,

Your friend,

Affectionately yours,

As ever,

With love,

Your loving son, (daughter, father, etc.)

The signature varies with the nature of the letter. In a letter to a close friend, the first name only may be signed. In other letters the full name is signed. It is customary for married women to sign their first and last names and below that their formal married names:

Sincerely yours,

Willa Morgan

(Mrs. L. J. Morgan)

ADDRESSING PERSONS OF RANK

The President of the United States

Envelope The President
Washington, D.C.

Salutation Mr. President: *or* Sir:

The Vice President

Envelope Honorable Richard R. Roe
Vice President of the United States
Washington, D.C.

Salutation Sir:

Cabinet Officials

Envelope The Secretary of State
or Honorable John L. Smith
Secretary of State

Salutation Sir:

Justices of the Supreme Court

Envelope Honorable William W. White
Justice of the United States Supreme Court

Salutation Sir: *or* Dear Sir:

Members of Congress

Envelope Honorable George G. Gordon
House of Representatives
or Honorable George G. Gordon, M.C.

Salutation Sir: *or* Dear Sir:

Governor of a State

Envelope His Excellency Robert R. Rhodes

Salutation Sir: *or* Dear Sir:

Mayor of a City

Envelope The Honorable John Preston

Salutation Sir: *or* Dear Sir: *or* My Dear Mr. Mayor:

Army and Navy Officers

Envelope General Henry H. Hunt, War Department
Rear Admiral Charles Chase, Navy Department

Salutation Sir: *or* Dear Sir:

Protestant Bishops

Envelope Right Reverend Daniel Dean
Bishop of

Salutation Reverend Sir:

Protestant Clergymen

Envelope The Reverend Lawrence Long

Salutation Dear Sir: or Sir:

A Catholic Cardinal

Envelope His Eminence John William Cardinal McCrae

Salutation Your Eminence:

A Catholic Archbishop and Bishop

Envelope His Excellency Thomas Thorne

Salutation Your Excellency:

A Catholic Priest

Envelope Reverend Paul Potter

Salutation Reverend Dear Father:

A Jewish Rabbi

Envelope Rabbi Morton Brown

Salutation Dear Sir:

PROOFREADING

Proofreading is a process of indicating to a printer on a proof sheet the typographical errors he has committed in setting a manuscript. The process of proofreading generally follows this pattern:

When a compositor has set in type the matter assigned to him, the type is placed in a holder called a *galley*. From this several proofs are then pulled which are known as *galley proofs*. These are gone over by a proofreader, who is usually assisted by a copyholder—a person who reads the manuscript aloud to the proofreader. The proofreader watches for errors in spelling, size and face of type, and other technical matters. He notes these in the margins of the galley proof, using a set of symbols which save him

the trouble of writing out the error-indications in words. A list of such symbols is given on pages 348 and 349, immediately following.

The corrected galley proofs, together with a clean set of proofs, are then sent to the author who may make further corrections or add new copy. The galley proofs are returned to the compositor who makes the corrections in type. For making books the type is then set up in pages of a specified size, proofs of which, known as *page proofs*, are pulled and gone over by the proofreader and the author. If further corrections are indicated, they are set in type, and all the type, presumably perfect typographically, then passes through other hands in the printing process.

THE PROOF-READER'S SIGNS

No ¶	No new paragraph.
Run in	Let there be no break in the reading.
¶	Make a new paragraph.
✓ ✓ ✓	Correct uneven spacing of words.
⌘	Strike out the marked type, word, or sentence.
9	Reverse this type.
#	More space where caret ^ is marked.
—	Contract the spacing.
⌋	Take out all spacing.
┌	Move this to the left.
┐	Move this to the right.
└┐	Raise this line or letter.
└┐	Depress this line or letter.
||	Make parallel at the side with other lines.
□	Indent line an em.
↓	Push down a space that blackens the proof.
×	Change this bruised type.
w.f.	Change this faulty type of a wrong font.
tr.	Transpose words or letters underlined.
l.c.	Put in lower-case, or small letters.
s.c.	Put in small capitals.
caps.	Put in capitals.
ˆ	Insert apostrophe. Superior characters are put over an inverted caret, as “ ˆ ˆ ˆ *, etc.; for inferior characters the caret is put in its usual position, as in ˆ.
rom.	Change from italic to roman.

<i>ital.</i>	Change from roman to italic.
○	Insert period.
,/	Insert comma.
;/	Insert semicolon.
:/	Insert colon.
-/	Insert hyphen.
|—/	One-em dash.
|² —/	Two-em dash.
Ⓢ	Take out cancelled character and close up.
Qu. or ?	Is this right? See to it.
^	Insert letter or word marked in margin.
|||	Hair-space letters as marked.
Stet	Restore crossed-out word or letter.
....	Dots put below the crossed word mean: Cancel the correction first made, and let the types stand as they were.
—	Over two or three letters. Change for the diphthong or for a logotype, as <i>ae</i> , <i>ffi</i> .
≡≡≡	Straighten lines.
////	Diagonal lines crossing the text indicate that the composition is out of square.
Out, see copy.	Here is an omission; see copy.

Corrections or textual improvements suggested to the author should be accompanied by the interrogation-point and be inclosed in parentheses or "ringed," as (*tr.* / ?) or (Ⓐ / ?).

Corrections should always be made in the margin, and never in the text; faults in the types or text to be indicated only by light pen marks.

PROOF BEFORE CORRECTION

caps./v PRESIDENT LINCOLN'S GETTYSBURG ADDRESS *7 1/2 centre*

l.c. *conceived/* FOUR score and seven years ago our father's brought forth *8*
on this continent, a new nation, ~~conceived~~ *capl.* in liberty, and
dedicated to the proposition that all ~~man~~ *e/* are created equal. *□*
tr Now we are engaged in a great civil war; testing whether *9*
that nation, or any nation so ~~conceived~~ *9* and so dedicated, can
long endure. We are met on a great battlefield of that war, *fi/o*
~~that war~~ *8* We have come to dedicate a portion of that field,
as a final resting place for those who gave here *tr.* their lives
that that nation might *live*. It is altogether fitting *and proper!* that we
should do this. *≡*
Run back But, in a larger sense, *we can not* dedicate—we can *rom!*
not *consecrate*—we can not *hallow*—this ground. The *□*
l.c. brave *men*, living *and* dead, who struggled here have *con-*
No tr *secrated* *it*, far above our poor power to add or detract. *□*
8 *lead* *wf.* *lead* *x* The world will little note, nor long remember what we *n/*
say here, but it can never forget what they did here. It is *□*
for us the living, rather, to be dedicated *here*, to the *stat/un/n/*
finished work which they who fought here have *so far* *thus* *tr.*
nobly advanced. It is rather for us to be here dedicated to the *e/*
great task remaining before us—that from these honored *↓*
dead we take increased devotion to that *Cause for which they* *l.c.*
gave the last full measure of devotion—that we here *highly*
resolve that these dead shall not have died in vain—and
that government of the people, by the people, for the *peo-*
ple, shall not perish from the earth. *□*

3 From a facsimile of the manuscript written by Mr. Lincoln for the Baltimore Fair—the *#*
1-1 capl. standard version, which appeared in the "Century Magazine" for February, 1894. *ital./8 8/M*

Orig. see copy

PRESIDENT LINCOLN'S GETTYSBURG ADDRESS¹

Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war; testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

But, in a larger sense, we can not dedicate—we can not consecrate—we can not hallow—this ground. The brave men, living and dead, who struggled here have consecrated it, far above our poor power to add or detract. The world will little note, nor long remember what we say here, but it can never forget what they did here. It is for us the living, rather, to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain—that this nation, under God, shall have a new birth of freedom—and that government of the people, by the people, for the people, shall not perish from the earth.

¹From a facsimile of the manuscript written by Mr. Lincoln for the Baltimore Fair—the standard version—which appeared in *The Century Magazine* for February, 1894.

THE ARTS

MUSIC

OUTSTANDING COMPOSERS

Bach, Johann Sebastian (1685-1750). German. Called the "father of modern music." Wrote in all forms except opera. Was a master of contrapuntal style. His greatest works have a nobility seldom equaled by other composers.

Bartok, Bela (1881-1945). Hungarian. Dissonant in style. Most of his works are for instrumental combinations.

Beethoven, Ludwig van (1770-1827). German. Wrote in all forms. His works are characterized by dramatic intensity, vigor, with great contrasts between the themes.

Bellini, Vincenzo (1802-35). Italian. Wrote many operas, of which *Norma* is most frequently heard today.

Berlin, Irving (1888-). American. Prolific composer of popular songs.

Berlioz, Hector (1803-69). French. Noted for brilliant orchestration and romantic style. Wrote for voice and orchestra.

Bizet, Georges (1838-75). French. Composer of *Carmen* and other, less successful operas. Also wrote songs and instrumental works.

Borodin, Alexander (1834-87). Russian. Wrote operas, among them *Prince Igor*, and symphonies.

Brahms, Johannes (1833-97). German. Has been called a classicist in a romantic age. Wrote in almost all forms except opera.

Bruckner, Anton (1824-96). Austrian. Wrote symphonies in a Wagner-like style. Also wrote vocal music.

Byrd, William (1540-1623). English. Wrote much religious music.

Carpenter, John Alden (1876-). American. Instrumental and vocal music. Best known work is "Adventures in a Pcrambulator."

Chausson, Ernest (1855-99). French. Symphonist and writer of opera.

Cherubini, Luigi (1760-1842). Italian. Was the leading operatic composer of his day. His operas, though melodious, are not heard today.

Chopin, Frederic (1810-49). Polish. Wrote almost exclusively for piano, giving the instrument a new individuality.

Copland, Aaron (1900-). American. Writes for orchestra and smaller instrumental combinations. Modern in style.

Corelli, Arcangelo (1653-1713). Italian. Great violinist and composer for that instrument.

Debussy, Claude (1862-1918). French. Impressionist in style. Painted a variety of tones with the orchestra. Wrote for orchestra, but chose such free forms as the prelude, nocturne, and symphonic poem.

Donizetti, Gaetano (1797-1848). Italian. Wrote many tuneful operas, including *Lucia di Lammermoor*.

Dvorak, Antonin (1841-1904). Bohemian. A nationalist in music, he used

the folk idiom of his people as the basis of his music.

Elgar, Edward (1857-1934). British. Wrote for instrumental groups and the voice. Most famous for *Pomp and Circumstance*.

Falla, Manuel da (1876-). Leading Spanish composer of today.

Fauré, Gabriel (1845-1924). French. Noted for his refinement of style. Wrote many songs.

Franck, César (1822-90). Belgian. Characterized by a vigorous style and a mastery of harmony. His only symphony, in D minor, is very popular.

Friml, Rudolf (1881-). Bohemian. Pianist and composer of light operas, including *The Firefly* and *Rose Marie*.

Gershwin, George (1898-1937). American. Wrote many popular songs as well as more serious works for orchestra. Composed one opera, *Porgy and Bess*.

Gluck, Christoph Willibald von (1714-87). A leading operatic composer of his day and an operatic reformer. Insisted that the music highlight the dramatic possibilities of the text.

Gounod, Charles (1818-93). French. Wrote many melodious and popular operas, among them *Faust* and *Romeo and Juliet*.

Grieg, Edvard (1843-1907). Norwegian. His best works are characterized by typically Scandinavian harmonies. Wrote songs, sonatas, and one piano concerto.

Handel, George Friedrich (1685-1759). German. A master of classic form. His best writing was for the voice, in the form of oratorios.

Harris, Roy (1898-). American. His works for orchestra are characterized by a thoughtful, somber style.

Haydn, Joseph (1732-1809). Austrian. Called the "father of the symphony." Wrote over 100 symphonies, as well as many other works for instru-

mental combinations. His work is characterized by grace and good humor.

Herbert, Victor (1859-1924). American. Prolific composer of operettas, including *Naughty Marietta* and *Babes in Toyland*.

Hindemith, Paul (1895-). German. Modern and dissonant in style. Writes for orchestra and voice.

Ives, Charles (1874-). American. Writer of songs and instrumental pieces.

Kern, Jerome (1885-1945). American. Has written many popular songs. Is best known for his score for *Show Boat*.

Lasso, Orlando (1530-94). Flemish. A great contrapuntalist known for his majestic style.

Lehar, Franz (1870-). Hungarian. Composer of many operettas, the most popular being *The Merry Widow*.

Liszt, Franz (1811-86). Hungarian. First composer to use the symphonic poem. Composed much music to romantic literary ideas. Piano virtuoso.

Lully, Giovanni (1633-87). French. Founded a school of French opera that emphasized the dramatic aspects of the story.

MacDowell, Edward (1861-1908). American. Made effective use of Indian idioms in his symphonic poems, suites, and sonatas.

Mahler, Gustave (1860-1911). German. Wrote 9 dramatic symphonies as well as vocal music.

Mendelssohn-Bartholdy, Felix (1809-41). German. A master of the orchestra. His works are characterized by grace and vigor. His works for chorus are popular in England.

Milhaud, Darius (1892-). French. Modern in style. Writes operas and instrumental works.

Morley, Thomas (c. 1557-1603). English madrigalist.

Monteverde, Claudio (1567-1643). Italian. An early writer of opera. He

was a pioneer in demanding a place of importance for the opera orchestra.

Moussorgsky, Modest (1839–81). Russian. Best known for his operas, which are rugged and powerful in style. Wrote a number of songs and shorter orchestral pieces.

Mozart, Wolfgang Amadeus (1756–91). Austrian. One of the most gifted and prolific composers in musical history. Wrote operas, symphonies, songs, and works in almost every other form. His work is noted for its sprightliness and humor, with touches of introspection in his later compositions.

Offenbach, Jacques (1819–90). French. Composer of gay, vivid operas and operettas.

Palestrina, Giovanni Pierluigi da (1526–94). Italian. One of the great figures in the history of music. Wrote ecclesiastical music characterized by a simple, contrapuntal style.

Peri, Jacopo (1561–1633). Italian. His opera *Euridice* was the first opera performed publicly (1600).

Piccini, Nicolo (1728–1800). Italian. A rival of Gluck. Wrote over 130 operas. Had a great command of melody.

Porter, Cole (1893–). American. Writer of sophisticated popular songs.

Près, Josquin des (1450–1521). Dutch. A great contrapuntalist.

Prokofiev, Sergei (1891–). Russian. Composer of lively, vigorous instrumental music.

Puccini, Giacomo (1858–1924). Italian. Writer of many melodious, popular operas, including *La Bohème* and *La Tosca*.

Purcell, Henry (1658–95). English. Writer of masques, operas, and instrumental music. Regarded as England's greatest composer.

Rachmaninov, Sergei (1873–1943). Russian. Composed songs, symphonies, concertos, and piano pieces in the nineteenth century romantic vein.

Rameau, Jean Philippe (1683–

1764). French. Composer of operas and music for the harpsichord.

Ravel, Maurice (1875–1937). French. Modernist in style. An effective orchestral colorist. The *Bolero* is his most popular, but not most representative work.

Rimsky-Korsakov, Nikolai (1844–1908). Russian. A great orchestrator. His works are vivid and colorful.

Rodgers, Richard (1902–). American. Composer of popular songs.

Romberg, Sigmund (1887–). American. Composer of popular operettas including *The Desert Song* and *The New Moon*.

Rossini, Gioachino (1792–1868). Italian. Wrote operas almost exclusively. His works that survive are sprightly and facile. He had a great gift for comic opera (*opera buffa*).

Scarlatti, Domenico (1685–1757). Italian. Pioneered in sonata form.

Schoenberg, Arnold (1874–). German. Known for his atonal style. Has composed for voice and instrumental groups.

Schubert, Franz (1797–1828). Austrian. Romantic composer, known for his beautiful melodies. Wrote symphonies, chamber music, and much vocal music.

Schumann, Robert (1810–56). German. Romantic composer. His music characterized by joyous quality and depth of feeling. Best known as composer for the piano.

Shostakovich, Dmitri (1906–). Russian. Composes in a striking, dramatic style. Prolific. Has written large symphonies and smaller works for other instrumental combinations and for the voice.

Sibelius, Jean (1865–). Finnish. Best known for his symphonies and tone poems. Characterized by somber quality.

Smetana, Friedrich (1824–84). Bohemian. Used folk themes and subjects freely in his works. Wrote operas and orchestral compositions.

Sousa, John Philip (1854-1932). American. Known as the "march king" for the many marches and other military music that he wrote.

Strauss, Johann (1825-99). German. The "waltz king." Wrote many concert waltzes and other light music.

Strauss, Richard (1864-). German. Master of orchestral tone and color. Most of his compositions for orchestra have a program, that is, a plot or other literary meaning.

Stravinsky, Igor (1882-). Russian. Writes in dissonant style. His most popular orchestral works were written for the ballet.

Sullivan, Arthur (1842-1900). English. In addition to the operas he wrote with W. S. Gilbert, he composed songs and oratorios.

Tchaikovsky, Peter Ilyitch (1840-93). Russian. His music is characterized by an emotional, melancholy

quality. A master of orchestral color. Wrote symphonies, ballets, operas, and smaller works.

Verdi, Giuseppe (1813-1901). Italian. Considered foremost Italian opera composer. Wrote almost exclusively for the stage. His operas are melodious and have great dramatic intensity. Works include *Rigoletto*, *La Traviata*, *Aida*, *Otello*, and *Falstaff*.

Wagner, Richard (1813-83). German. Revolutionized opera by insisting on the unity of all the parts, calling his works "music dramas." Drew heavily from Teutonic mythology for his subject matter. Works include *The Ring of the Nibelung*, *Tristan und Isolde*, and *Die Meistersinger*.

Weber, Karl Maria von (1786-1826). German. Wrote romantic operas that were intensely Germanic in style.

Wolf, Hugo (1860-93). Austrian. Wrote many fine songs.

GREAT OPERAS

Aida. By Verdi. First performed in Cairo, 1871. One of the most popular of all grand operas.

Barber of Seville, The. By Rossini. First performed in Rome, 1816. Tuncful comic opera of intrigue.

Bartered Bride, The. By Smetana. First performed in Prague, 1866. Comic opera, often presented in English translation.

Bohème, La. By Puccini. First performed in Turin, 1896. Melodious, sentimental opera of love in the Latin Quarter of Paris.

Boris Godunov. By Moussorgsky. First performed in St. Petersburg, 1873. Tragic music drama of a czar tortured by his conscience.

Carmen. By Bizet. First performed in Paris, 1875. The story of a passionate gypsy girl, it is probably the most familiar of all operas.

Cavalleria Rusticana (*Rustic Chiv-*

alry). By Mascagni. Melodramatic story of Sicilian peasants.

Daughter of the Regiment, The. By Donizetti. First performed in Paris, 1840. Comic opera. Provides opportunity for vocal display by coloratura soprano.

Don Giovanni. By Mozart. First performed in Prague, 1787. A lively version of the amorous adventures of the Spanish figure, Don Juan.

Falstaff. By Verdi. First performed in Milan, 1893. An operatic version of Shakespeare's *Merry Wives of Windsor*.

Faust. By Gounod. First performed in Paris, 1859. Freely adapted from Goethe's play, it has been performed more frequently than any other opera.

Fidelio. Beethoven's only opera. First performed in Vienna, 1805. The music is symphonic in structure and puts great demands on the singers.

Freischütz, Der (*The Freeshooter*). By Weber. First performed in Berlin, 1821. The story is based on an old German legend.

Gioconda, La. By Ponchielli. First performed in Milan, 1876. The tragic story of a beautiful street singer.

Hänsel and Gretel. By Humperdinck. First performed in Weimar, 1893. Charming retelling in music of the fairy tale.

Lakmé. By Delibes. First performed in Paris, 1883. Deals with the love of a Hindu maiden for a British army officer.

Lohengrin. By Wagner. First performed in Weimar, 1850. The story of a swan knight who champions a maiden in distress.

Louise. By Charpentier. First performed in Paris, 1900. A story of Bohemian life in Paris.

Lucia di Lammermoor. By Donizetti. First performed in Naples, 1835. Adapted from the Scott novel, the opera is a favorite with coloratura sopranos.

Madame Butterfly. By Puccini. First performed in Milan, 1904. The story of a Japanese maid who loves an American naval officer.

Manon. By Massenet. First performed in Paris, 1884. An adaptation of Abbé Prévost's novel, *Manon Lescaut*.

Masked Ball, The. By Verdi. First performed in Rome, 1859. Originally written as the story of the assassination of a king, the opera as now given deals with the killing of the "Governor of Boston."

Meistersinger, Die (*The Mastersingers*). Wagner's only comic opera. First performed in Munich, 1868. Satirizes pedants and critics.

Mignon. By Thomas. First performed in Paris, 1866. The plot is based on Goethe's "Wilhelm Meister." The music is fresh, graceful, and tuneful.

Mikado, The. By Gilbert and Sullivan. First performed in London, 1885.

Set in Japan, it is a satire on officialdom in general.

Norma. By Bellini. First performed in Milan, 1831. It is a dramatic opera set to a story of the ancient Druids.

Orpheus and Eurydice. By Gluck. First performed in Vienna, 1762. A retelling of the ancient myth, it is the oldest opera still generally performed.

Otello. By Verdi. First performed in Milan, 1887. An adaptation of Shakespeare's tragedy, it contains some of Verdi's most dramatic music.

Pagliacci, I (*The Players*). By Leoncavallo. First performed in Milan, 1892. A melodious opera of intrigue in a troupe of traveling players.

Parsifal. By Wagner. First performed in Bayreuth, 1882. The composer's last opera, it is based on the story of the search for the Holy Grail.

Patience. By Gilbert and Sullivan. First performed in London, 1881. A tuneful satire on the esthetic movement of the time.

Pinafore, H.M.S. By Gilbert and Sullivan. First performed in London, 1878. A comic opera, it satirizes those who obtain rank through influence rather than ability.

Porgy and Bess. By Gershwin. First performed in New York, 1935. A folk opera of life in the Negro quarter of a Southern city, its music is lively and colorful.

Rigoletto. By Verdi. First performed in Venice, 1851. Musically dramatic and intense, it is the story of a court jester who kills his daughter in error.

Ring of the Nibelung, The. By Wagner. Story of mythological gods and Teutonic heroes, it is composed of four separate music dramas: *Das Rheingold* (first performed in Munich, 1869), *Die Walküre* (first performed in Munich, 1870), *Siegfried* (first performed in Bayreuth, 1876), and *Die Götterdämmerung* (*The Twilight of the Gods*) (first performed in Bayreuth, 1876). The story is allegorical. The four dramas are linked by char-

acters in common and by musical themes (leitmotifs) representing characters and ideas.

Salome. One-act opera by Richard Strauss. First performed in Dresden, 1905.

Samson and Delilah. By Saint-Saëns. First performed in Weimar, 1877. Almost oratorio-like in form.

Tales of Hoffman, The. By Offenbach. First performed in Paris, 1881. A fantastic opera telling of the loves of the German writer Hoffman.

Tannhäuser. By Wagner. First performed in Dresden, 1845. The story of the conflict between sacred and profane love in the heart of the minstrel knight Tannhäuser.

Tosca, La. By Puccini. First performed in Rome, 1900. Melodious, melodramatic opera of the love of a singer and a painter.

Traviata, La. By Verdi. First performed in Venice, 1853. Contains some of Verdi's most striking arias. The setting is Paris. Based on Dumas' *La Dame aux Camélias*.

Tristan und Isolde. By Wagner. First performed in Munich, 1865. The story of the tragic love of the knight Tristan and the Irish maid Isolde. The music is of great romantic intensity.

Trovatore, Il (The Troubadour). By Verdi. First performed in Rome, 1853. Many familiar melodies in a melodramatic setting.

OUTSTANDING INTERPRETERS OF MUSIC

ANDERSON, MARIAN (1908-), contralto	LEHMANN, LOTTE (1885-), prano
ARMSTRONG, LOUIS (1900-), jazz trumpeter	MCCORMACK, JOHN (1884-1945), tenor
BEECHAM, SIR THOMAS (1879-), conductor	MELCHIOR, LAURITZ (1890-), tenor
CARUSO, ENRICO (1873-1921), tenor	MENUHIN, YEHUDI (1916-), violinist
CASALS, PABLO (1876-), cellist	PEERCE, JAN (1904-), tenor
CHALIAPIN, FEODOR (1873-1938), bass	PIATIGORSKY, GREGOR (1903-), cellist
CROSBY, BING (1904-), baritone	PINZA, EZIO (1892-), bass
ELMAN, MISCHA (1892-), violin- ist	RACHMANINOV, SERGEI (1873-1943), pianist
FEUERMANN, EMANUEL (1892-1942), cellist	ROBESON, PAUL (1898-), bass
FLAGSTAD, KIRSTEN (1895-), soprano	RUBINSTEIN, ARTUR (1886-), pianist
GOODMAN, BENNY (1909-), jazz clarinetist	SCHNABEL, ARTUR (1882-), pianist
HEIFETZ, JASCHA (1901-), violin- ist	SCHWEITZER, ALBERT (1875-), organist
HOFMANN, JOSEPH (1876-), pianist	SERKIN, RUDOLPH (1903-), pianist
HOROWITZ, VLADIMIR (1904-), pianist	STOKOWSKI, LEOPOLD (1882-), conductor
KOUSSEVITZKY, SERGE (1874-), conductor	SZIGETI, JOSEPH (1892-), violin- ist
KREISLER, FRITZ (1875-), violin- ist	THOMAS, JOHN CHARLES (1891-), baritone

TIBBETT, LAWRENCE (1896-),
baritone
TOSCANINI, ARTURO (1867-),
conductor
WALTER, BRUNO (1876-), con-
ductor and pianist
YSAYE, EUGÈNE (1858-1931), violin-
ist

Musical Instruments

Stringed Instruments. Violin, viola, violoncello, contrabass.

Keyboard Stringed Instruments. Piano, harpsichord.

Plucked-string Instruments. Harp, guitar, mandolin, banjo, balalaika, ukulele, zither.

Wind Instruments. Trumpet, cornet, French horn, trombone, tuba, bugle.

Woodwind Instruments. Clarinet, saxophone, oboe, English horn, bassoon, flute, piccolo.

Percussion Instruments. Kettledrum, bass drum, snare drum, cymbals, glockenspiel, celesta, xylophone, triangle, tambourine, gong, castanets, bell.

Leading American Musical Organizations

Baltimore Symphony Orchestra
Boston Symphony Orchestra
Chicago Opera Company
Chicago Symphony Orchestra
Cincinnati Symphony Orchestra
Cleveland Orchestra
Detroit Symphony Orchestra
Indianapolis Symphony Orchestra
Kansas City Symphony Orchestra
Metropolitan Opera Association, New York
Minneapolis Symphony Orchestra
National Broadcasting Company Symphony Orchestra, New York
National Symphony Orchestra, Washington, D.C.
New York City Symphony Orchestra
Philadelphia Orchestra
Philharmonic-Symphony Orchestra of New York
Pittsburgh Symphony Orchestra
Rochester Philharmonic Orchestra
St. Louis Symphony Orchestra
San Carlo Opera Company
San Francisco Opera Company
San Francisco Symphony Orchestra

FINE ARTS

MASTER PAINTERS AND THEIR FAMOUS WORKS

Angelico, Fra (1387-1455). Italian. *Coronation of the Virgin, Adoration of the Magi, The Crucifixion.*

Bellini, Giovanni (1430-1516). Italian. *The Transfiguration, Madonna and Saints, Christ's Agony in the Garden.*

Bellows, George (1882-1925). American. *Stag at Sharkey's, Up the Hudson.*

Benton, Thomas Hart (1889-). American. *The Meal, Homestead, Huck Finn and Nigger Jim.*

Bonheur, Rosa (1822-1899). French. *Ploughing in the Nivernais, The Horse Fair.*

Botticelli, Sandro (c. 1447-1510). Italian. *Birth of Venus, Calumny, Madonna and Child, Nativity.*

Braque, Georges (1881-). French. *Beach at Dieppe, The Table, Still Life, Painter and Model.*

Brueghel, Pieter (c. 1525-1569). Dutch. *Autumn, Summer, Winter, Adoration of the Magi, The Wedding Feast, The Road to Calvary.*

Burchfield, Charles (1893-). American. *March, Promenade, The Night Wind, The Interurban Line.*

Cassatt, Mary (1845-1926). American. *At the Opera, Mother and Child, A Lady at Ten.*

Cézanne, Paul (1839-1906). French. *The Card Players, Still Life, Self-portrait, Mont Sainte Victoire, Man in Blue.*

Chardin, Jean Baptiste (1699-1779). French. *Boy Blowing Bubbles, The Morning Toilet, Blessing, Governance.*

Cimabue (c. 1240-1302). Italian. *Crucifixion, Madonna, Madonna and St. Francis.*

Clouet, François (c. 1510-c. 1572). French. *Pierre Quête, Cardinal de Chatillon.*

Constable, John (1776-1837). English. *Hay Wain, The Cornfield, Salisbury Cathedral.*

Copley, John Singleton (1737-1815). American. *The Death of Chatham, Youth Rescued from a Shark, Copley Family.*

Corot, Jean Camille (1796-1875). French. *Evening Star, Dante and Virgil, Villa d'Avray.*

Correggio, Antonio Allegri da (1494-1534). Italian. *The Marriage of St. Catherine, The Assumption of the Virgin, Jupiter and Antiope.*

Courbet, Gustave (1819-77). French. *Burial at Ornans, The Quarry, Young Woman of the Seine, The Stone Breakers, La Mère Grégoire.*

Dali, Salvador (1904-). Spanish. *Nostalgic Echo, Portrait of Gala, A Chemist Lifting with Precaution the Cuticle of a Grand Piano.*

Daumier, Honoré (1808-79). French. *The Uprising, Christ and the Apostles, Christ Mocked, The Theater Box.*

David, Jacques Louis (1749-1825). French. *Coronation of Napoleon, Marat, Mme. Récamier.*

Degas, Edgar (1834-1917). French.

Dancers Dressing, Absinthe, Rehearsal of the Ballet, The Toilet.

Delacroix, Eugène (1798-1863). French. *Milton Dictating Paradise Lost, Cromwell at Windsor Castle, Jewish Wedding in Morocco.*

Dérain, André (1880-). French. *Cathedral of St. Paul and the Thames, Still Life, Eve Curie, La Route d'Ollières.*

Dufy, Raoul (1877-). French. *The Studio, Nice, Seascape, Royal Yacht Club, Landscape.*

Dürer, Albrecht (1471-1528). German. *St. John and St. Peter, Portrait of a Lady, The Worship of the Trinity.*

Dyck, Anthony van (1599-1641). Flemish. *Betrayal, The Mocking of Christ, Pieta, Anna Wake, Earl of Warwick.*

Eakins, Thomas (1844-1916). American. *The Pathetic Song, Starting Out after Rail, Miss Van Buren, Shad Fishing.*

Eyck, Hubert van (c. 1366-1426). Flemish. *The Adoration of the Lamb.*

Eyck, Jan van (c. 1390-c. 1441). Flemish. *Virgin and Child, Madonna, Man with the Pinks.*

Fragonard, Jean Honoré (1732-1806). French. *The Romance of Love, The Swing, The Billet Doux, L'Etude.*

Gainsborough, Thomas (1727-88). English. *George III, Pitt, Sterne, Samuel Johnson, Mrs. Siddons, The Morning Walk, Blue Boy.*

Gauguin, Paul (1848-1903). French. *The Yellow Christ, Maori Venus, Spirit of the Dead, Maori Women, Day of the God.*

Ghirlandaio, Domenico (1449-94). Italian. *Adoration of the Shepherds, Santa Maria Novella frescoes, Calling of Peter and Andrew.*

Giotto (c. 1276-c. 1337). Italian. *Arena Chapel frescoes, Obsequies of St. Francis, Pieta.*

Gogh, Vincent van (1853-1890). Dutch. *Van Gogh's Bedroom, Woman of Arles, Sailing Boats on the Beach, Night Cafe, Fields at Anvers.*

Goya y Lucientes, Francisco de' (1746-1828). Spanish. *Charles III, Maria Louisa, La Maya, Family of Charles IV, The Knife Grinder.*

Greco, El (Domenico Theotocopuli) (c. 1548-1614). Greek. *View of Toledo, Assumption of the Virgin, Pentecost, Cardinal Don Fernando Niño de Guevara.*

Gropper, William (1897-). American. *The Senate, The Cigar Maker.*

Grosz, George (1893-). German. *Street in Berlin, American Street Scene, Third Class Funeral, Ecce Homo.*

Hals, Frans (c. 1581-1666). Dutch. *The Laughing Cavalier, Companies of Archers, Young Man with a Slouch Hat.*

Hogarth, William (1697-1764). English. *The Shrimp Girl, Self-portrait, Marriage à la Mode.*

Holbein, Hans (1497-1543). German. *Erasmus, Thomas Cromwell, The Ambassadors, Catherine Howard, Sir Thomas More.*

Homer, Winslow (1836-1910). American. *Northeaster, High Wind in the Bahamas, Snap the Whip, The Gulf Stream.*

Hopper, Edward (1882-). American. *Lighthouse Hill, Corner Saloon, House by the Railroad.*

Ingres, Jean Dominique (1780-1867). French. *Oedipus and the Sphinx, La Source, The Sleep of Osian, Odalisque, Mme. Rivière.*

Inness, George (1825-1894). American. *Rainbow after a Storm, Millpond, Peace and Plenty, Rosy Morn.*

Kuhn, Walt (1880-). American. *The Juggler, Apples in the Hay, Acrobat in White.*

Leger, Fernand (1881-). French. *The City, Girl with a Vase.*

Lorrain, Claude (1600-82). French. *The Herdsman, David at the Caves of Abdullah, The Landing of Aeneas, Egeria.*

Luks, George (1867-1933). Amer-

ican. *Woman with a Churn, The Pawnbroker's Daughter.*

Manet, Edouard (1832-83). French. *The Boy with the Sword, Guitar Player, In a Boat, The Balcony, Olympia.*

Mantegna, Andrea (1431-1506). Italian. *Ceiling of the Camera degli Sposi, Gonzaga Family, St. Sebastian.*

Marin, John (1870-). American. *River Effect, Lower Manhattan, Young Man of the Sea.*

Matisse, Henri (1869-). French. *The Dance, The Dinner Table, The Studio, The Blue Window, Girl in a Yellow Dress, Olga.*

Memling, Hans (1430-95). Flemish. *The Mystic Marriage, The Seven Joys of Mary, Portrait of a Lady of Quality.*

Michelangelo Buonarroti (1475-1564). Italian. *Ceiling of the Sistine Chapel, Temptation of St. Anthony, The Holy Family.*

Millet, Jean François (1814-75). French. *The Gleaners, The Angelus, The Man with the Hoe, The Woodcutters.*

Modigliani, Amadeo (1884-1920). Italian. *Reclining Nude, Woman in Blue, Head of a Spanish Painter.*

Monet, Claude (1840-1926). French. *Notre Dame, Ice Breaking Up, Waterloo Bridge, Water Lilies, The Poplars.*

Murillo, Bartolome (1617-87). Spanish. *The Young St. Thomas, Immaculate Conception, Head of Christ.*

Orozco, Jose Clemente (1883-). Mexican. Murals at Dartmouth College and the New School for Social Research, *Zapatistas.*

Picasso, Pablo (1881-). Spanish. *The Young Ladies of Avignon, Still Life with Mandolin and Biscuit, Table before a Window, Mother and Child, Woman in White, Harlequin, Guernica.*

Pollaiuolo, Antonio (1429-98). Italian. *Batling Nudes, Heracles and Antaeus, Heracles Slaying the Hydra.*

Raphael, Sanzio (1483-1520). Italian. *The Granduca Madonna, The Sistine Madonna, The Ansidei Madonna, Castiglione, The Alba Madonna, Disputa, School of Athens.*

Rembrandt van Rijn (1606-69). Dutch. *Woman Paring Her Nails, The Night Watch, The Syndics, The Visitation, Juno, The Supper at Emmaus, The Anatomy Lesson, The Noble Slav, The Good Samaritan.*

Renoir, Auguste (1841-1919). French. *Luncheon of the Boating Party, Little Margot Bérard, Three Bathers, The Judgment of Paris, The Loge, Young Girls at the Piano.*

Reynolds, Joshua (1723-92). English. *Samuel Johnson, Lady Cockburn and Her Children, Lady Bamfylde, The Age of Innocence.*

Riviera, Diego (1886-). Mexican. *The Grinder, Moscow, Nov. 7, 1927, Fiesta in Tehuantepec, frescoes at the New School for Social Research and the Mexican Ministry of Education.*

Rouault, Georges (1871-). French. *The Judges, Nocturne, The Crucifixion, Head of a Man.*

Rubens, Peter Paul (1577-1640). Flemish. *Christ Bearing the Cross, Kermis, Self-portrait, A King, Return from the Flight into Egypt, The Judgment of Paris.*

Ruysdael, Jacob (1628-81). Dutch. *Bleaching Fields at Haarlem, Wheat-fields, Castle of Bentheim, The Jewish Burial Grounds.*

Ryder, Albert (1847-1917). American. *Night Clouds, Diana's Hunt, Sailing by Moonlight, The Race Track.*

Sargent, John Singer (1856-1925). American. *Robert Louis Stevenson, The Three Graces, Portrait of Mme. X.*

Seurat, Georges (1859-91). French. *The Bathers, Sunday Afternoon on the Island of La Grande Jatte, The Beach at Le Crotoy, The Come-on.*

Sisley, Alfred (1840-99). French. *Banks of the Seine, The Bridge of*

Moret-sur-Loing, The Banks of the Loing.

Sloan, John (1871-). American. *In the Wake of the Ferry, McSorley's Bar, Pigeons.*

Stuart, Gilbert (1755-1828). American. *George Washington, Anne Pennington, Mrs. Yates.*

Tintoretto (Jacopo Robusti) (1518-94). Italian. *The Last Judgment, Crucifixion, The Marriage of Bacchus and Ariadne, St. Augustine Healing the Plague.*

Titian (Tiziano Vecelli) (1477-1576). Italian. *Assumption of the Virgin, Bacchus and Ariadne, Concert, The Education of Cupid, The Entombment.*

Toulouse-Lautrec, Henri (1864-1901). French. *Oscar Wilde, At the Moulin Rouge, At the Cirque Fernando, A la Mie.*

Turner, Joseph (1775-1831). English. *Battle of the Nile, Ulysses Deriding Polyphemus, Calais Pier, Grand Canal, Venice, Sun Rising in the Mist, Bridge of Sighs.*

Velasquez, Diego (1599-1660). Spanish. *The Infanta Maria Teresa, St. Matthew, Self-portrait, The Tapestry Weavers, The Maids of Honor.*

Vermeer, Jan (1628-91). Dutch. *Lady with the Pearl Necklace, Lady Standing at the Virginals, Young Woman with a Water Jug, Woman Reading a Letter.*

Veronese, Paolo (1528-88). Italian. *Adoration, Feast in the House of Levi, Finding of Moses, Marriage at Cana, Supper at Emmaus.*

Vinci, Leonardo da (1452-1519). Italian. *Adoration, The Last Supper, Madonna and Child, Madonna of the Rocks, Madonna with Saint Anne, Mona Lisa.*

Watteau, Antoine (1684-1721). French. *Embarkation to Cythera, Judgment of Paris, The French Comedians, Le Mezzetin.*

Weber, Max (1881-). Amer-

ican. *Rabbi, Summer, Decoration with Cloud, Invocation.*

Whistler, James Abbott McNeill (1834-1903). American. *The Golden Screen, Mother, Portrait of Miss Alexander, Old Battersea Bridge, Little White Girl.*

MASTER SCULPTORS AND THEIR FAMOUS WORKS

Barnard, George Gray (1863-1938). American. *The Two Natures, The Hower, Great God Pan.*

Borglum, Gutzon (1867-1941). American. *Lincoln, Mares of Diomedes, Mt. Rushmore Memorial.*

Brancusi, Constantin (1876-). Rumanian. *Bird in Flight, Head of Mlle. Pogany.*

Cellini, Benvenuto (1500-71). Italian. *Perseus with the Head of Medusa, Saltcellar, Leda and the Swan.*

Donatello (1386-1466). Italian. *David, St. George, Zuccone, Gattamelata, Singing Gallery.*

Epstein, Jacob (1880-). American. *Adam, Christ, Duchess of Hamilton, Oscar Wilde.*

French, Daniel Chester (1850-1931). American. *Death and the Young Sculptor, Lincoln, Gallaudet group.*

Ghiberti, Lorenzo (1378-1455). Italian. *Doors of the Baptistery, Gates of Paradise.*

Goujon, John (c. 1515-66). French. *Caryatids, Fountain of the Innocents.*

Hoffman, Malvina (1887-). American. *Russian Bacchanale, Pavlowa Gavotte, Paderewski.*

Kolbe, Georg (1877-). German. *Dancer, Assunta.*

Lachaise, Gaston (1882-1935). French. *Woman.*

Laurent, Robert (1890-). American. *Pearl.*

Lehmbruck, Wilhelm (1881-1919). German. *Kneeling Woman.*

Wood, Grant (1892-1942). American. *Daughters of the American Revolution, American Gothic.*

Zurbaran, Francisco de (1598-1662). Spanish. *The Flight into Egypt, Christ at Gethsemane, Portrait of a Girl.*

MacMonnies, Frederick (1863-1937). American. *Nathan Hale, Shakespeare, Bacchante.*

Maillol, Aristide (1861-1944). French. *Seated Woman, Flora, Venus.*

Manship, Paul (1885-). American. *Centaur and Dryad, Infant Hercules, Dancing Girl and Fauns, Little Brother.*

Michelangelo Buonarroti (1475-1564). Italian. *Dawn, Twilight, Day, Night, David, Brutus, Moses, Bound Slave.*

Myron (Fifth century B.C.). Greek. *Discobolus, Ladas the Runner, Athena and Marsyas.*

Phidias (Fifth century B.C.). Greek. *Athena Lemnia, Athena of the Parthenon, Zeus of Olympia.*

Pilon, Germain (1535-90). French. *Cardinal de Birague, Three Christian Graces, Mausoleum of Henry II.*

Praxiteles (c. 370-c. 340 B.C.). Greek. *Hermes with the Infant Dionysus, Aphrodite of Cnidus, Eros of Thespiae, Apollo.*

Quercia, Jacopo della (1378-1438). Italian. *Fonte Gaia.*

Robbia, Luca della (c. 1400-82). Italian. *Madonna.*

Rodin, Auguste (1840-1917). French. *The Hand of God, The Thinker, The Kiss, The Burghers of Calais.*

Saint-Gatdons, Augustus (1848-1907). American. *Shaw Memorial, Admiral Farragut, Lincoln, General Sherman.*

Scopas (Fourth century B.C.).
Greek. *Bacchante, Mars, Meleager.*

Taft, Lorado (1860-1936). American. *The Great Lakes group, Black Hawk, Fountain of Time.*

Verrocchio, Andrea del (1435-1488). Italian. *Bartolomeo Colleoni, Beheading of John the Baptist, Incredible of St. Thomas.*

Zorach, William (1887-).
Mother and Child.

Famous Architecture

Acropolis, Athens
Alhambra, Granada
Bauhaus, Dessau (Walter Gropius)
Canterbury Cathedral, England
Cathedral of Chartres, France
Cathedral of Pisa, Italy
Cathedral of Reims, France
Chicago Tribune Tower
Chrysler Building, New York
Colosseum, Rome
Daily News Building, New York (Raymond Hood)
Empire State Building, New York (Shreve, Lamb, and Harmon)
Erechtheum, Athens
Fontainebleau Castle, Paris
Forum, Rome
Hotel des Invalides, Paris (Mansart)
Houses of Parliament, London
Milan Cathedral, Italy
Monticello, Virginia (Jefferson)
Notre Dame Cathedral, Paris
Palace of Versailles
Pantheon, Rome
Parthenon, Athens
Pennsylvania Station, New York
Philadelphia Savings Fund Society Building (Howe and Lescaze)
RCA Building, New York
Robie House, Chicago (Frank Lloyd Wright)
St. John Lateran, Rome
St. Mark's Cathedral, Venice
St. Paul's Cathedral, London (Christopher Wren)
St. Peter's Cathedral, Rome
Saint Sophia Cathedral, Istanbul

St. Thomas' Church, New York
(Ralph Adams Cram and Bertram Goodhue)

Salisbury Cathedral, England

Temple of Karnak, Egypt

Trinity Church, Boston (Henry H. Richardson)

Vendramini Palace, Venice (Pietro Lombard)

Woolworth Building, New York (Cass Gilbert)

Leading American Art Museums

Baltimore Museum of Art
Boston Museum of Fine Arts
Brooklyn Museum
Buffalo Fine Arts Academy—Albright Art Gallery
Carnegie Institute, Pittsburgh, Pa.
Cincinnati Art Museum
City Art Museum of St. Louis
Cleveland Museum of Art
Corcoran Gallery of Art, Washington, D.C.
Currier Gallery of Art, Manchester, N.H.
Denver Art Museum
Fine Arts Gallery, San Diego, Cal.
Frick Collection, New York, N.Y.
Henry E. Huntington Library and Art Gallery, San Marino, Cal.
Layton Art Gallery, Milwaukee, Wis.
Los Angeles County Museum
Metropolitan Museum of Art, New York, N.Y.
Museum of the Hispanic Society of America, New York City
Museum of Modern Art, New York, N.Y.
Museum of Navajo Art, Santa Fe, N.M.
Museum of Non-objective Art, New York, N.Y.
National Gallery of Art, Washington, D.C.
Newark (N.J.) Museum
Pennsylvania Academy of Fine Arts, Philadelphia, Pa.

Philadelphia Museum of Art
 Pierpont Morgan Library, New York,
 N.Y.

Rochester (N.Y.) Museum of Art
 San Francisco Museum of Art
 Thayer Art Museum, Lawrence, Kans.

Toledo (Ohio) Museum of Art
 Virginia Museum of Fine Arts, Rich-
 mond, Va.

Whitney Museum of American Art,
 New York, N.Y.
 Worcester (Mass.) Art Museum

THEATER AND FILMS

FAMOUS ACTORS OF RECENT TIMES

ADAMS, MAUDE (1872-)
 ANDERSON, JUDITH (1898-)
 ARLISS, GEORGE (1868-)
 BANKHEAD, TALLULAH (1903-)
 BARRYMORE, ETHEL (1879-)
 BARRYMORE, JOHN (1882-1942)
 BARRYMORE, LIONEL (1878-)
 BARTHLEMESS, RICHARD (1897-)
 BENNETT, RICHARD (1873-1944)
 BERGMAN, INGRID (1917-)
 BERGNER, ELIZABETH (1900-)
 BERNHARDT, SARAH (1845-1923)
 BOGART, HUMPHREY (1899-)
 BOOTH, EDWIN (1833-1893)
 BOYER, CHARLES (1899-)
 CAGNEY, JAMES (1904-)
 CAMPBELL, MRS. PATRICK (1865-
 1940)
 CARNOVSKY, MORRIS (1898-)
 CHANEY, LON (1883-1930)
 CHAPLIN, CHARLES (1889-)
 CHRISTIANS, MADY (1907-)
 CLAIRE, INA (1892-)
 COHAN, GEORGE M. (1878-1942)
 COLBERT, CLAUDETTE (1905-)
 COLMAN, RONALD (1891-)
 COOPER, GARY (1901-)
 CORNELL, KATHARINE (1898-)
 CRAVEN, FRANK (1880-1945)
 CRAWFORD, JOAN (1908-)
 DAVIS, BETTE (1908-)
 DIGGES, DUDLEY (1880-)
 DONAT, ROBERT (1905-)
 DREW, JOHN (1853-1927)
 DUNCAN, AUGUSTIN (1873-)

DUNNE, IRENE (1904-)
 DUSE, ELEANORA (1859-1924)
 EAGLES, JEANNE (1894-1929)
 ELLIOT, MAXINE (1871-1940)
 EVANS, MAURICE (1901-)
 FAIRBANKS, DOUGLAS (1884-1939)
 FAVERSHAM, WILLIAM (1868-1940)
 FAY, FRANK (1897-)
 FISKE, MINNIE MADDERN (1865-
 1937)
 FITZGERALD, BARRY (1888-)
 FONTANNE, LYNN (1887-)
 FORBES-ROBERTSON, SIR JOHNSTON
 (1853-1933)
 GABLE, CLARK (1901-)
 GALLIENNE, EVA LE (1899-)
 GARBO, GRETA (1906-)
 GARSON, GREER
 GIELGUD, JOHN (1904-)
 GILLETTE, WILLIAM (1855-1937)
 GISH, DOROTHY (1898-)
 GISH, LILLIAN (1896-)
 GREENSTREET, SIDNEY (1880-)
 HAMPDEN, WALTER (1879-)
 HARDWICKE, SIR CEDRIC (1893-)
 HAYES, HELEN (1901-)
 HEPBURN, KATHARINE (1909-)
 HITCHCOCK, RAYMOND (1870-1929)
 HOWARD, LESLIE (1893-1943)
 HULL, HENRY (1888-)
 HUSTON, WALTER (1884-)
 IRVING, SIR HENRY (1838-1905)
 JANNINGS, EMIL (1886-)
 JEFFERSON, JOSEPH (1829-1905)
 JOUVET, LOUIS

KARLOFF, BORIS (1887-)	RÉJANE, MME. (1857-1920)
LACKAYE, WILTON (1862-1932)	ROBESON, PAUL (1898-)
LAUGHTON, CHARLES (1899-)	ROBINSON, EDWARD G. (1893-)
LEIGH, VIVIEN (1914-)	ROGERS, GINGER (1911-)
LUKAS, PAUL (1895-)	RUSSELL, LILLIAN (1861-1922)
LUNT, ALFRED (1893-)	SKINNER, OTIS (1858-1942)
MANSFIELD, RICHARD (1857-1907)	SOTHERN, E.H. (1859-1933)
MARCH, FREDRIC (1897-)	STEWART, JAMES (1908-)
MARLOWE, JULIA (1866-)	STONE, FRED (1873-)
MASSEY, RAYMOND (1896-)	STROHEIM, ERICH VON (1885-)
MEREDITH, BURGESS (1909-)	SULLAVAN, MARGARET (1910-)
MERIVALE, PHILIP (1886-)	TAYLOR, LAURETTE (1887-)
MODJESKA, HELENA (1845-1909)	TEMPLETON, FAY (1865-1939)
MUNI, PAUL (1897-)	TERRY, ELLEN (1848-1928)
NAZIMOVA, ALLA (1879-1945)	TRACY, SPENCER (1900-)
OLIVIER, LAURENCE (1907-)	VALENTINO, RUDOLPH (1895-1926)
OSPENSKAYA, MARIA (1876-)	VEIDT, CONRAD (1893-1943)
PICKFORD, MARY (1893-)	WARFIELD, DAVID (1866-)
PIDGEON, WALTER (1898-)	WELLES, ORSON (1915-)
RAINS, CLAUDE (1889-)	WOLHEIM, LOUIS (1881-1931)

SOME OUTSTANDING MOTION PICTURES

(Unless otherwise indicated, the following films were made in the United States.)

The Birth of a Nation. 1915. Directed by D.W. Griffith. With Lillian Gish, H. B. Walthall, Ralph Lewis, Wallace Reid, and Raoul Walsh.

Intolerance. 1916. Directed by D.W. Griffith. With Mae Marsh, Constance Talmadge, Robert Harron, and Eugene Pallette.

The Cabinet of Dr. Caligari. 1919. German. Directed by Robert Wiene. With Conrad Veidt and Werner Krauss.

The Covered Wagon. 1923. Directed by James Cruze. With J. Warren Kerrigan, Lois Wilson, and Ernest Torrence.

Greed. 1923. Directed by Erich von Stroheim. With Zasu Pitts, Gibson Gowland, and Jean Hersholt.

The Last Laugh. 1924. German. Directed by F.W. Murnau. With Emil Jannings.

The Big Parade. 1925. Directed by King Vidor. With Renée Adorée, John Gilbert, and Karl Dane.

The Gold Rush. 1925. Directed by Charles Chaplin. With Georgia Hale, Chaplin, and Mack Swain.

Potemkin. 1925. Russian. Directed by Sergei Eisenstein.

Mother. 1926. Russian. Directed by Vsevelod Pudovkin.

The Love of Jeanne Ney. 1927. German. Directed by G.W. Pabst. With Brigitte Helm, Fritz Rasp, and Vladimir Sokolov.

Ten Days That Shook the World. 1927. Russian. Directed by Sergei Eisenstein.

The Passion of Joan of Arc. 1928. French. Directed by Carl-Theodore Dreyer.

The Love Parade. 1929. Directed by Ernst Lubitsch. With Jeannette MacDonald and Maurice Chevalier.

All Quiet on the Western Front. 1930. Directed by Lewis Milestone. With Lew Ayres, Louis Wolheim, and Slim Summerville.

M. 1931. German. Directed by Fritz Lang. With Peter Lorre.

A Farewell to Arms. 1932. Directed by Frank Borzage. With Helen Hayes, Gary Cooper, and Adolphe Menjou.

Grand Hotel. 1932. Directed by Edmund Goulding. With Greta Garbo, John Barrymore, Wallace Beery, Lionel Barrymore, Joan Crawford, Lewis Stone, and Jean Hersholt.

A Nous la Liberté. 1932. French. Directed by René Clair.

Cavalcade. 1933. Directed by Frank Lloyd. With Diana Wynyard, Clive Brook, and Frank Lawton.

Chapayev. 1934. Russian. Directed by the Vasilyev brothers. With Boris Babochkin.

It Happened One Night. 1934. Directed by Frank Capra. With Claudette Colbert and Clark Gable.

Of Human Bondage. 1934. Directed by John Cromwell. With Leslie Howard, Bette Davis, and Frances Dee.

The Informer. 1935. Directed by John Ford. With Margot Graham, Victor McLaglen, Wallace Ford, and Preston Foster.

Modern Times. 1935. Directed by Charles Chaplin. With Paulette Goddard and Chaplin.

The Scoundrel. 1935. Directed by Ben Hecht and Charles MacArthur. With Noel Coward, Julie Haydon, Hope Williams, and Lionel Stander.

The Story of Louis Pasteur. 1935. Directed by William Dieterle. With Paul Muni, Josephine Hutchinson, and Anita Louise.

The Thirty-nine Steps. 1935. English. Directed by Alfred Hitchcock. With Madeleine Carroll and Robert Donat.

Carnival in Flanders. 1936. French. Directed by Jacques Feyder. With Françoise Rosay and Louis Jouvet.

Fury. 1936. Directed by Fritz Lang. With Sylvia Sydney and Spencer Tracy.

The Good Earth. 1937. Directed by Sidney Franklin. With Paul Muni and Luise Rainer.

Grand Illusion. 1937. French. Directed by Jean Renoir. With Dita Parlo, Jean Gabin, Pierre Fresnay, and Erich von Stroheim.

The River. 1937. Directed by Pare Lorentz.

Snow White and the Seven Dwarfs. 1938. Produced by Walt Disney.

The City. 1939. Directed by Willard van Dyke and Ralph Steiner.

Gone with the Wind. 1939. Directed by Victor Fleming and Jack Conway. With Clark Gable, Leslie Howard, Olivia de Havilland, and Vivien Leigh.

Goodbye, Mr. Chips. 1939. English. Directed by Sam Wood. With Robert Donat and Greer Garson.

Fantasia. 1940. Produced by Walt Disney.

The Grapes of Wrath. 1940. Directed by John Ford. With Henry Fonda, Jane Darwell, Charles Grapevin, John Carradine, and John Qualen.

Casablanca. 1942. Directed by Michael Curtiz. With Humphrey Bogart, Ingrid Bergman, Paul Henreid, and Claude Rains.

Mrs. Miniver. 1942. Directed by William Wyler. With Greer Garson, Walter Pidgeon, Teresa Wright, and Dame May Whitty.

For Whom the Bell Tolls. 1943. Directed by Sam Wood. With Gary Cooper, Ingrid Bergman, Katina Paxinou, and Akim Tamiroff.

Watch on the Rhine. 1943. Directed by Herman Shumlin. With Paul Lukas and Bette Davis.

Going My Way. 1944. Directed by Leo McCarey. With Bing Crosby, Barry Fitzgerald, and Rise Stevens.

Wilson. 1944. Directed by Henry King. With Alexander Knox, Geraldine Fitzgerald, and Thomas Mitchell.

A Tree Grows in Brooklyn. 1945. Directed by Elia Kazan. With Peggy Ann Garner, James Dunn, Dorothy McGuire, and Joan Blondell.

DANCING

The dance is generally believed to be the oldest form of art. In earlier times the dance was part of religious ritual and was so considered among the Egyptians, the Hebrews, and the Greeks. Primitive peoples today use the dance as part of their religious ceremonies. Among western nations dancing for enjoyment replaced the older religious dances, taking the form of folk or social dances. Among the better known folk dances are the Highland fling and sword dance (Scotch), the sailor's hornpipe and morris dance (English), the jig and reel (Ireland), czardas (Hungary), mazurka (Poland and Russia), tarantella (Italy), the bolero, seguidilla, and fandango (Spain), and the Virginia reel (American). Early social dances were the minuet, saraband, gavotte, quadrille, and cotillion. Popular social dances today are the waltz, fox-trot, tango, samba, conga, rumba, polka, and dances of the jitterbug type.

The ballet, first popular in the fifteenth century in Italy, tells a story in dance form, performed by a single dancer or a group. Classical ballet is a

highly formalized dance, with definite, prescribed movements to be performed. Among the classical ballets still performed today are *Les Sylphides*, *Swan Lake*, and *Giselle*. Early in the twentieth century a movement was begun to introduce a freer ballet style. Leaders of this movement were Isadora Duncan and Michel Fokine. Some of the newer ballets are *Scheherazade*, *Petrouchka*, *The Rites of Spring*, *Pillar of Fire*, *Rodeo*, and *Gaieté Parisienne*. Some well-known contemporary choreographers are George Balanchine, Antony Tudor, Leonid Massine, Agnes de Mille, Bronislava Nijinska. Outstanding dancers of the twentieth century are Anna Pavlova, Vaslav Nijinsky, Alicia Markova, Alexandra Danilova, and Tamara Karsavina.

In further revolt against the formality of ballet has been the modern dance which is based on body movement rather than regular dance patterns. Leaders in this field have been Isadora Duncan, Ruth St. Denis, Mary Wigman, Rudolf von Laban, Doris Humphrey, Martha Graham, and Charles Weidman.

PHOTOGRAPHY

Photographs are made by means of a camera which has these basic elements: a lens which admits light into an otherwise light-tight chamber, a shutter which regulates the length of time the light passes through the chamber, and a plate or film covered with a substance that is sensitive to light. When the film has been exposed it is passed through a chemical solution which fixes the light impression. This process is known as developing. The result is a transparent negative on which the light values are reversed,

that is, the areas of the photographed object which were light appear dark and vice versa. The negative is then printed on sensitized paper on which the original values are restored. In addition to the three basic elements, most modern cameras have a device for changing the focus of the lens and a finder by which the object to be photographed may be arranged on the film.

In the early days of photography, pictures could be made only of stationary objects with a great deal of

light, but improvements have been made in the speed of the lenses and the sensitivity of the film so that now pictures may be made with relatively little light and of rapidly moving objects.

Another recent development in photography has been the increased ease of taking photographs in natural colors.

Motion picture photography is basically the same as still photography, but instead of taking a single picture, the motion picture camera takes a series of pictures of a movement or scene on a roll of film. In standard

film, of 35 mm. width, there are 16 individual photographs or frames to each foot. Amateur film is 16 mm. or 8 mm. wide.

Outstanding artists of the still camera include Mathew Brady, Alfred Stieglitz, Walker Evans, Berenice Abbot, Man Ray, Margaret Bourke-White, Paul Strand, Edward Steichen, Morris Engel, Edward Weston, Ralph Steiner.

Some outstanding motion picture photographers are Floyd Crosby, Paul Strand, Edouard Tisse, Lee Garms, James Wong Howe, Tony Gaudio, and Gregg Toland.

PRINTING

In about 1440 movable type was invented, probably by Johann Gutenberg in Germany. This invention made possible the printing of books at comparatively cheap cost. Printing then spread quickly to many parts of Europe. It was brought to England by William Caxton in 1476 and to America by Stephen Daye in 1638. Among the great early printers were Caxton, John Baskerville, and Giambattista Bodoni, each of whom was also a type designer. Variations of their basic designs are in use today. The text of this book, for example, is set in Baskerville type.

Since the invention of movable type, three other great inventions have marked the history of printing. In 1810 Friedrich König invented the steam printing press, making possible greatly increased output by the presses, which until then had been run by hand. In 1805, the first paper-making machine, invented by the Fourdrinier brothers, began operation. This machine turned

out paper in the form of continuous rolls instead of individual sheets, making for more rapid printing. The third invention was made by Otto Mergenthaler, who built an automatic type-casting machine which he called the Linotype machine. It was first used in 1886 by the New York *Tribune*. The principle of the machine is the casting of a complete line of type in lead by means of a series of matrices assembled in their proper order by pressing individual keys arranged in a keyboard. Other automatic type-setting machines are the Monotype, which produces individual types rather than whole lines, the Intertype, the Ludlow, and the Typograph.

Other recent improvements in printing have been the invention of the half-tone process by Benjamin Day, which made possible the reproduction of photographs in black and white, and the invention of the three-color process by which material in any color or shade can be faithfully reproduced.

THE SCIENCES

ASTRONOMY

Astronomy is the science of the heavenly bodies—the sun, the planets and their satellites, the moon, the stars, comets, and meteors.

The Solar System comprises the sun and the various planets that revolve around it; the outermost limit of the solar system is about 5,000,000,000 miles from the sun. There are nine known planets, as follows:

been known to extend as far as 100,000 miles across. They may reduce the radiation of heat and light to the earth, and affect radio transmission or reception. The faculae are spots brighter than the adjacent photosphere—often occurring near sun spots or close to the limb (edge) of the sun.

A total solar eclipse takes place when the moon passes between the

NAME	AVERAGE DISTANCE FROM SUN	AVERAGE DIAMETER
Mercury	36,000,000 miles	3,000 miles
Venus	67,000,000 miles	7,000 miles
Earth	93,000,000 miles	7,920 miles
Mars	141,000,000 miles	4,200 miles
Jupiter	483,000,000 miles	87,000 miles
Saturn	886,000,000 miles	71,500 miles
Uranus	1,782,000,000 miles	32,000 miles
Neptunc	2,793,000,000 miles	33,000 miles
Pluto	3,680,000,000 miles	4,000 miles

The Sun is a rotating, almost round body of fiery gaseous matter, averaging 864,000 miles in diameter; its average distance from the earth is 92,900,000 miles. By the force of its gravitational attraction, the sun keeps the planets in their regular orbits and pulls them with it through space at the rate of about 12 miles per second. The surface of the sun is called the photosphere, which has a temperature of 6,000 degrees Centigrade or 11,000 degrees Fahrenheit; above it is a layer of incandescent gas particles known as the chromosphere. Sun spots, appearing (when seen through a telescope) as dark holes in the photosphere, have

sun and the earth. When this happens, one may see (without the aid of a telescope) the prominences—jets of flaming gas that have been known to rise as high as 500,000 miles from the photosphere, as well as the corona which is a layer of luminous vapor lying above the chromosphere and shedding a pearly light as far as 1,000,000 miles. The shadow cast by the moon during a total eclipse is seldom more than 180 miles in width, and is known as the umbra.

The Earth is 25,000 miles in circumference at the equator, rotating on its axis once every 24 hours, and revolving around the sun once in

365¼ days. Surrounding the earth is the atmosphere—the upper part of which is called the stratosphere—composed mainly of nitrogen and oxygen, and held by the force of gravity. The atmosphere diffuses the sun's rays, causing the blue color of the sky. Most scientists believe that the earth was once a gaseous mass which cooled into its present shape; they estimate its age as at least 3,000,000 years. Although the average temperature on the surface is about 39 degrees Fahrenheit, the center is extremely hot, while the interior of the earth is kept solid by the great pressure exerted by the outer portions.

The point at which the sun crosses the line of the equator on the way north is known as the vernal equinox, occurring on March 21; the autumnal equinox, on September 22, is the point at which the sun crosses the equator on its way south. These points coincide with certain stars or constellations, and vary slightly from year to year because of the wobbling of the earth's axis.

The Moon revolves around the earth from west to east in about 29½ days, and is 2,160 miles in diameter; its average distance from the earth is about 238,857 miles. Reflected light from the sun causes the moon to shine. The moon rotates on its axis, with a period of rotation so nearly coinciding with its period of revolution around the earth that the same side is always turned toward the earth. The surface is pitted with depressions surrounded by circular rings which rise to a height of about 20,000 feet, and may be extinct volcanic craters. Extremely hot in the sunlit areas and equally cold in the shade, the moon has no atmosphere and little if any water. Both the moon and the sun cause ocean tides on the earth by the force of gravity. The moon is a satellite of the earth.

An eclipse of the moon occurs when the latter passes into the shadow cast

by the earth. This can happen only if the moon is on the opposite side of the earth from the sun, and in a nearly or exactly direct line with the sun. Since the path of the moon around the earth varies, the moon usually passes to either one side or the other of the shadow—which is 6,000 miles in diameter. Two or three of these lunar eclipses take place each year, and at least one is likely to be total.

Mercury is the smallest planet in the solar system, and its period of rotation is equal to its period of revolution around the sun—or 88 days. It travels through space on its orbit at the rate of about 30 miles per second. About 37 per cent of Mercury is in continual daylight, and the same proportion is in eternal night; the other 26 per cent is alternately lighted by the sun and plunged into darkness. Since this planet is so near the sun, the day and night changes bring extreme heat and cold. Mercury has little if any atmosphere, and no satellite. Its gravity is less than that of any other planet; a man weighing 150 pounds on the earth would weigh only 45 pounds on Mercury.

Venus has no satellite, but is otherwise much like the earth in size and mass, and in having a dense atmosphere. Its period of revolution around the sun is 225 days—at a speed of about 22 miles per second, and its period of rotation is 224 days. The average temperature on the surface of the planet is not more than 1½ times that of the earth, or somewhat like the climate of tropical regions such as South America. One of the brightest objects in the solar system, Venus reflects 59 per cent of the sun's light, as compared with 44 per cent reflected by the earth. It is sometimes visible (without the aid of a telescope) as an evening star shortly after sunset, and as a morning star just before sunrise.

Mars comes closer to the earth than any other major planet at a time suit-

able for observation—within about 35,000,000 miles at its nearest point. The period of rotation of Mars on its axis is almost the same as that of the earth, or 24 hours and 37 minutes; its period of revolution around the sun is approximately 687 days. The seasons on this planet correspond somewhat to earthly seasons, but apparently it has little if any water or oxygen, and any life that may exist on Mars must be of a low order—corresponding to the lower forms of plant and animal life on earth. Mars has two satellites or moons called Phobos and Deimos, each of which is about 10 miles in diameter; Phobos revolves around Mars in $7\frac{1}{2}$ hours, while Deimos takes $30\frac{1}{4}$ hours.

Jupiter is the largest of the planets, revolving around the sun in about 12 years, at a speed of slightly more than 8 miles per second. Jupiter's period of rotation on its axis is approximately 9 hours; however, different latitudes exhibit varying times of rotation—indicating that the planet may be gaseous. It is much less solid than the earth, since its density is 1.3 that of water or very nearly the same as that of the sun. When seen through a telescope, Jupiter appears to be marked with light and dark bands and a fairly permanent red spot. The planet reflects 44 per cent of the comparatively small amount of sunlight that it receives, and its gravity is very powerful; a person weighing 150 pounds on the earth would weigh 390 pounds on Jupiter.

Jupiter has at least nine satellites or moons, the last of which was discovered in 1914. The first four were discovered by Galileo in 1610, and are known as the Galilean satellites—being named Io, Europa, Ganymede, and Callisto. Their diameters vary between less than 100 and more than 3,000 miles; the nearest to Jupiter is 261,800 miles away, while the farthest is about 15,000,000 miles distant.

Saturn, a fluid and probably gaseous

body, has a density of only .7 that of water, and its time of revolution around the sun is almost 30 years—at a speed of about 6 miles per second. Its period of rotation is slightly more than 10 hours at its equator, varying toward the poles. Saturn is encircled by three transparent rings—designated as A, B, and C—and has a thickness of between 20 and 40 miles. The outer diameter of A is 170,000 miles; of B, 145,000 miles; of C, 113,000 miles. A is 10,000 miles broad; B, 16,000 miles; C, 11,000 miles. These rings revolve around the planet, shining by reflected sunlight, and are believed to be composed of very fine particles.

Like Jupiter, Saturn has at least nine satellites or moons. Their distances from Saturn vary between 116,000 and 8,000,000 miles; the diameter of the largest is estimated at about 3,000 miles, but the others are considerably smaller.

Uranus, discovered in 1781 by Sir William Herschel, takes 84 years to revolve around the sun, at a speed of about 4 miles per second. Like Saturn and Jupiter, it is surrounded by a thick atmosphere; its density (only 1.36 that of water) indicates that Uranus is probably gaseous, and its mass is almost 15 times that of the earth. Uranus rotates on its axis once in 10.2 hours. Appearing somewhat greenish when viewed through a telescope, the planet has four satellites or moons; their distance from Uranus varies between 119,000 and 364,000 miles. It reflects 63 per cent of the small amount of sunlight it receives, and can sometimes be seen with the naked eye.

Neptune, farther from the sun than any other major planet except Pluto, was discovered by Leverrier and Adams in 1845. Its period of revolution around the sun is almost 165 years, at a speed of 3.40 miles per second, and it rotates on its axis once in from 8 to 15 hours. Neptune's mass is about 17

times that of the earth. The planet is surrounded by a thick atmosphere that is probably heavy with clouds; it has one satellite or moon, and reflects 73 per cent of the light which it receives from the sun. Having an average density 1.6 times that of water, Neptune is a gaseous body, and cannot be seen without the aid of a telescope. It has a strong gravitational attraction, since a person weighing 150 pounds on the earth would weigh 165 pounds on Neptune.

Pluto, the most distant known planet of the solar system, was sought by astronomers for many years according to the predictions made by Dr. Percival Lowell, the founder and director of the Lowell Observatory in Flagstaff, Arizona. It was at last located by C. W. Tombaugh of that observatory in 1930. Lying in the constellation of Cancer, Pluto's mass is about .83 of that of the earth, and it takes 248 years to revolve around the sun—at a speed of 3 miles per second. Having a density about 4 times that of water, the planet is believed to be equally as solid as Mars. The minimum distance of Pluto from the earth is approximately 2,700,000,000 miles.

Minor Planets, also known as asteroids or planetoids, number more than 1,000 and are found chiefly between Mars and Jupiter, revolving in varying orbits around the sun. None of them can be seen without the aid of a telescope. The largest is Ceres—about 500 miles in diameter—discovered in 1801; others are as small as 10 miles in diameter. In 1898 the curious small planet Eros was discovered. Its orbit is so eccentric that it comes within 14,000,000 miles of the earth, nearer than any other planet except the moon, and accurate new calculations of the sun's distance have been made by means of Eros. Some authorities believe that these minor planets represent a former single planet which exploded at some time in the remote past.

Comets are luminous bodies, usually irregular in shape, frequently having a long transparent tail of great brightness and traveling on an orbit around the sun. The most famous comet visible to the unaided eye was Halley's comet—last seen in 1910; it will not be seen again until about 1985, for its period of revolution around the sun is approximately 75 years. It was named after Edmund Halley, an English astronomer who lived from 1656 until 1742, and who first calculated its period—identifying it with a comet that had been previously seen at intervals of about 75 years. Encke's comet has a period of three and one third years, while some 60 comets are known with periods of less than 80 years.

Comets are divided into groups, each group associated with one of the major planets. Jupiter's family of comets numbers 50, with periods that range from 3.3 to almost 9 years; Saturn's family consists of four, with periods between 13 and 17.7 years; Uranus has only two—with an average period of nearly 37 years. Halley's comet belongs to Neptune's family, which numbers nine comets with an average period of about 71 years. Comets which do not belong in the above groups have extremely long periods. From such comets, astronomers have deduced that there may be planets even farther distant than Pluto.

Meteors, which are also known as "shooting stars," are parts of comets' tails or isolated small bodies that strike the earth's atmosphere, glowing because of the heat generated as they pass through the air. The flash of a meteor is seldom longer than one second in duration; the body causing it is usually as small as two tenths of an inch in diameter, and weighs less than an ounce. About 20,000,000 meteors bright enough to be seen by the unaided eye enter the atmosphere in one day, in different parts of the world;

many millions more are visible through telescopes. The majority of meteors are burned up long before they strike the earth's surface, and those which reach the ground are known as meteorites. In rare instances, these may be very large—weighing several tons; an enormous specimen can be seen at the Museum of Natural History in New York City. They are usually metallic, containing chiefly iron and nickel, although some small meteorites are more like common stones.

When the earth passes through the tail of a comet, a vast number of shooting stars may be seen. These meteoric showers are generally associated with the orbit of some comet—especially the Leonid showers (in October or November), which recur with particular brilliance every 33 years.

Stars are luminous heavenly bodies, so far distant from the solar system that the light from the nearest star—traveling at the speed of 186,000 miles per second—takes about four years to reach the earth. Unlike the planets, the stars shine by their own light; the brightness of stars is classified numerically by magnitude: the higher the number, the fainter the star. Only 11 of them are of first magnitude, including Sirius (the Dog Star), which is the most brilliant of all, Betelgeuse, Polaris, and Arcturus. The total number of stars is probably in the neighborhood of three to four billion; of this number, only about 6,000 are visible without the aid of a telescope. They vary in size, temperature, and density as well as in apparent brightness. The Milky Way is known to be a dense mass of stars, seemingly concentrated around our solar system like a great wheel or spiral, and similar spirals have been observed as distant nebulae which may be universes similar to ours.

While the planets appear to gleam with a fairly steady light, the stars "twinkle" as we gaze at them. This twinkling is caused by refraction

through the earth's atmosphere. Although the stars seem to be motionless, they are all moving at speeds of from 10 to 100 miles per second; some revolve around others, forming double stars which appear single to the unaided eye. About 15,000 double stars have been discovered by astronomers. Most of the stars vary between one third and three times the mass of our sun, but Betelgeuse—in the constellation of Orion—has a mass almost 100 times that of the sun. Many are variables, not emitting the same amount of light steadily; some of these variables are double stars, one of which is often comparatively dark and may eclipse the brighter one as viewed from the earth. Algol is such an eclipsing variable. Other variables are pulsating—the difference in their light being due to the stars' swelling and contracting in size.

In general, it may be assumed that the stars contain no elements which are not known on earth; but their elements (which include hydrogen, helium, calcium, and iron) are in very different stages of ionization, owing to the great temperatures and pressures that exist on the stars. A new star called a nova occasionally appears to astronomers, flaring up brightly for only a short time. Most novae are observed in nebulae such as the Milky Way; about 86 have been seen in the great nebula in the constellation Andromeda.

Constellations are groups of stars, and are known by special names for the convenience of astronomers. Stars are frequently identified by referring them to the constellations of which they seem to form a part—ignoring the fact that they may be separated by many millions of miles. The ecliptic, or path of the sun as it appears to cross the sky, is the middle line of the zodiac; the latter is an imaginary belt that includes the paths of the moon and of the major planets, and is

divided into 12 parts called the signs of the zodiac. Each of these signs is identified with a constellation in that part of the heavens. These 12 constellations are: Aries (the Ram), Taurus (the Bull), Gemini (the Twins), Cancer (the Crab), Leo (the Lion), Virgo (the Virgin), Libra (the Scales), Scorpio (the Scorpion), Sagittarius (the Archer), Capricornus (the Goat), Aquarius (the Water-Carrier), and Pisces (the Fishes). To the north of the zodiac is the north polar hemisphere of the heavens; there are 27 northern constellations. South of the zodiac is the south polar hemisphere, with 48 constellations. The two stars forming the points of the side farthest from the handle of the Big Dipper—in the northern hemisphere—are the “pointers,” for an imaginary line drawn through them will point to Polaris (the North Star), almost coinciding with a line drawn through the North Pole of the earth, continuous with the earth’s axis. The Big Dipper has also been called the Wagon, the Plow, and Charles’ Wain or Cart. It consists of only seven brilliant stars, a small part of the constel-

lation Ursa Major (Great Bear). The Little Dipper, more exactly called Ursa Minor (Little Bear), is north of Ursa Major.

Orion is a northern constellation that includes Betelgeuse, Rigel, Bellatrix, and other bright stars. The Gemini (or Twins) are two stars side by side, usually known as Castor and Pollux, and are located roughly between Orion and Ursa Major. Almost opposite the latter is Cassiopeia, in the shape of an uneven W—below which is the famous constellation Andromeda which has a great nebula containing millions of separate stars. Adjacent to Andromeda, in the direction of Orion, is Perseus, including the star Algol. Between Perseus and Orion is Taurus with two great star clusters known as the Pleiades and the Hyades. Aries is below Perseus and Andromeda; Hercules, almost below Ursa Minor, contains a globular star cluster and is especially interesting because our sun and planets are racing toward it at the speed of 12 miles per second; Bootes (the Plowman) is between and slightly below Ursa Major and Hercules.

THE AURORAS

The *aurora borealis* (northern lights) and the *aurora australis* (southern lights) are luminous atmospheric phenomena which occur in the Arctic and Antarctic regions, respectively. The northern lights are visible between the fortieth and sixtieth parallels of North America and between the fiftieth and seventieth parallels of Europe and Asia. The southern lights are observed between the fortieth and fifty-fifth parallels of South America.

The auroras are now attributed to a discharge of electricity through the thin atmosphere that exists in the area from 50 to 100 miles above the earth.

The resultant display is of great beauty, and takes the form of bands, rays, arcs, patches, and clouds, which range in color from a silvery white to yellow, green, violet, and red. The shapes and directions assumed by the auroras indicate that they are affected by the magnetic field of the earth. There is also a close connection between the auroras and sun spots. It is found that whenever a brilliant aurora appears it is accompanied by magnetic storms and heavy earth currents. These disturb telegraph, cable, and radio communication. Auroras are studied by scientists with the aid of photographs.

GEOLOGIC ERAS OF THE EARTH

Era and Length Estimated.	Period and Length Estimated.	Epoch.	Characteristic Life.
Cenozoic. (Recent Life.) 55,000,000 yrs.	Quaternary. 2,000,000 yrs.	Recent. Pleistocene, or Glacial.	"Age of man." Animals and plants of modern types.
	Tertiary. 53,000,000 yrs.	Pliocene. Miocene. Oligocene. Eocene. Paleocene.	"Age of mammals." Possible first appearance of man. Rise and development of highest orders of plants.
Mesozoic. (Intermediate Life.) 106,000,000 yrs.	Cretaceous. 55,000,000 yrs.	Upper. Lower.	"Age of reptiles." Rise and culmination of huge land reptiles (dinosaurs). First appearance of birds and mammals; seed-bearing flowering plants, including palms and hardwood trees.
	Jurassic. 28,000,000 yrs.	Upper. Middle. Lower.	
	Triassic. 23,000,000 yrs.	Upper. Middle. Lower.	
Paleozoic. (Old Life.) 314,000,000 yrs.	Permian 33,000,000 yrs.		"Age of amphibians." Dominance of tree ferns and huge mosses. Earliest cone-bearing trees. Beginnings of backboned land animals. Insects.
	Carboniferous 74,000,000 yrs.	Pennsylvanian. Mississippian.	
	Devonian. 37,000,000 yrs.	Upper. Middle. Lower.	"Age of fishes." Shellfish (mollusks) also abundant. Rise of amphibians and land plants.
	Silurian. 23,000,000 yrs.		Shell-forming sea animals dominant. Rise of fishes and of reef-building corals.
	Ordovician. 79,000,000 yrs.	Upper. Middle. Lower.	Shell-forming sea animals. Culmination of the buglike marine crustaceans known as trilobites. First trace of insect life.
	Cambrian. 69,000,000 yrs.	Upper. Middle. Lower.	Trilobites, brachiopods and other sea shells. Seaweeds (algae) abundant. No trace of land animals.
Proterozoic. (Primordial Life.) 1,336,000,000 yrs.	Pre-Cambrian.		First life that has left distinct record. Crustaceans and algae.

WEATHER AND CLIMATE

Weather is the state of the atmosphere in regard to temperature, moisture, clearness, pressure, or any other condition. The various forms of weather include rain, snow, sleet, hail, fog, and dew—all of which are known by scientists as precipitation. The earth's atmosphere contains moisture in the form of water vapor; precipita-

tion can be produced when wind or some other cause brings about a great decrease in the temperature of the air, which is then unable to hold the water vapor. The latter is then precipitated as rain, snow, or in whatever form conditions require. This process is called condensation. At night the earth becomes cool before the air does—hence

when the warm air comes in contact with the cold ground, dew may be created. Lying near the earth's surface, fog is a cloud produced when the water vapor in the air is condensed into tiny particles, and may be caused by a cold wind. In low-lying, damp regions fog occurs often; it is commonly seen during the seasons when the temperature varies to a great degree in different parts of the night or day.

Clouds in the sky are formed when a warm, moist current of air rises to high altitudes and is greatly cooled. If the cooling is sufficient to free a large amount of moisture, rain falls—turning into sleet if it freezes before reaching the ground. Sometimes the cooling lowers the temperature below the freezing point of water, and the resulting precipitation is known as snow. Hailstones are created whenever falling raindrops are carried up and down a number of times through alternate regions of snow and rain. Lightning, which frequently occurs during rainstorms, is a brilliant flash of light caused by a sudden discharge of electricity in the atmosphere; thunder results from the abrupt expansion of the air through which lightning passes. Heat lightning does not produce thunder, and is believed to be a reflection, from water vapor and clouds, of an electrical discharge taking place somewhere beyond the horizon.

Humidity is the state of the atmosphere in regard to the amount of water vapor it contains. When the air contains all the moisture it can hold, it is saturated; the hotter it is, the more moisture is required to produce saturation. If the air contains one half the amount of water vapor needed to saturate it, the relative humidity is said to be 50. When the humidity reaches 100, precipitation results. Hot weather is much more easily endured when the humidity is low; a high degree of humidity reduces the rate of

evaporation of sweat from the skin, with consequent discomfort.

Atmospheric pressure is low when air currents rise; when this occurs, surrounding air tends to flow into the low pressure area from all directions. If this condition persists for a number of days, the centers of these lows—impelled by the prevailing westerly winds—rush across the country at the rate of several hundred miles per day and are known as cyclones. They move with a velocity of from 20 to 40 miles an hour and are frequently violent in tropical regions. A tornado is a rapidly whirling, more destructive wind that is accompanied by a cloud in the shape of a funnel, and travels for many miles in a comparatively narrow path. Hurricanes resemble cyclones and are marked by rain, lightning, and thunder; their velocity does not usually exceed 100 miles per hour. Tropical hurricanes often originate in the Atlantic Ocean and move westward to the Gulf of Mexico, sometimes continuing on to the northeast, as in the case of the New England hurricane of 1938.

The Weather Bureau bases its daily predictions upon much carefully gathered information, and its forecasts do not often extend over 24 to 36 hours ahead. At the different large centers, reports concerning the weather are received from many observation branches throughout the country. Barometers are used to find out the exact atmospheric pressure. In its simplest form, a barometer is a long glass tube partially filled with mercury; the upper end is sealed, and the lower open end dipped into a dish of mercury. The space above the mercury in the tube is as airless as possible. Thus the pressure of the atmosphere on the surface of the mercury in the dish supports the contents of the tube, and the greater the pressure, the higher the mercury in the tube will rise. Readings on weather maps are often expressed in the lengths

of these mercury columns. As normal air pressure will support a column of mercury 30 inches long at sea level, a reading on a weather map of 29.3 inches would mean low pressure and a reading of 30.8 would indicate high pressure. Other important devices used by the Weather Bureau include thermometers to ascertain the temperature, hygrometers to determine the degree of humidity in the air, anemometers to measure the velocity or force of winds, and pluviometers to measure the amount of rain that falls at a certain time and place. Progress in aviation has greatly increased the importance of accurate weather forecasts. Airplane lines, working in cooperation with the Weather Bureau, keep their pilots informed constantly of weather conditions along the route of the flight.

Climate is a condition of the weather which repeats itself in any region from year to year. The five climate zones of the earth are the north and south frigid zones, the north and south temperate zones, and the torrid zone. The Arctic and Antarctic circles bound the areas of the two frigid zones, and indicate the northern and southern limits of the temperate zones. The latter extend from these circles south to the Tropic of Cancer and north to the Tropic of Capricorn. Both of these tropics are imaginary lines marking the solstices—or periods when the sun arrives at its most northern or southern point from the equator. In June the northern summer solstice occurs, and the winter solstice takes place in December. The equator passes through the center of the torrid zone, which lies between the two tropics.

Climate is mainly affected by latitude. Since the earth's heat is gained from the sun, in tropical parts of the world the rays of the sun are always more vertical. The poles are approximately 4,000 miles more distant from the sun than is the equator, and the great coldness of the Arctic and

Antarctic regions is caused by their receiving only half as much heat as do the warm countries. Climate is also governed by altitude; places that are high above sea level are colder because the air at such heights is less dense, and consequently does not retain the heat as well. Scientists have deduced that each increase of 300 feet in altitude brings a decrease of one degree in temperature.

Another important factor in climate is the wind. Since the regions around the equator are most heated by the sun, the air above these localities is warmed at the same time, becoming lighter and rising to great heights because of the pressure of colder and heavier air on the north and south. This heated air cools and increases in density. Parts of it spread northward or southward, or return to the earth's surface; and since the earth is rotating on its axis, the air currents produce winds. The constant, prevailing winds appear to be the most effective cause of the warm ocean currents which modify the climate of the coastal areas of the United States and parts of Europe. Prevailing winds in the northwest section of this country come in from the Pacific Ocean, and are well laden with moisture. As these winds move eastward over the Rocky Mountains, they are cooled and leave a great deal of their moisture behind, thus causing quite heavy periodic rains. On the eastern side of the mountains the cooled winds are warmed by the land areas. Since increasing the temperature of air increases its ability to hold moisture, the winds have a drying effect on the territory over which they blow. The states immediately to the east of the Rocky Mountains are therefore of a semi-desert character.

The climate of many seacoasts is made pleasant by an alternation of cool breezes. While the sun is shining, the air on land is warmed to a greater degree than the air over the ocean, and a breeze from the sea begins soon after

sunrise and decreases with the approach of darkness. At night the air on land becomes cool more quickly than the air over the water, resulting in a land breeze beginning shortly after sunset.

Prevailing winds across the Atlantic Ocean are westerly; an airplane journey from the United States to Europe is more rapid and easier than the return trip, because "tail winds" help to drive the airplane from west to east, and "head winds" impede its progress from east to west. The Northeast Trades are winds prevailing from the northeast, and are encountered north of the equator. Trade winds south of the equator blow from the southeast. A part of the ocean near the equator is known as the doldrum belt—where unexpected calms, baffling winds, and sudden storms occur frequently and hinder navigation. The mistral is a cold, dry north wind blowing through the southern portion of France toward the Mediterranean Sea; the sirocco is a hot wind which travels from the deserts of Africa across the Mediterranean to southern Europe, conveying warm, humid air to whatever region it may pass. The periodic winds of India and southeastern Asia are called monsoons, and bring prolonged rains during the summer. In the period from August until October, typhoons (violent whirlwinds) occur in the western Pacific Ocean—mainly between the Philippine Islands and Japan.

The seasons are the four principal divisions of the year: spring, summer, autumn, and winter. They are caused by variation in the intensity of the sun's rays. In its passage around the sun once every year, the earth behaves like a huge spinning top, with its axis constantly pointed in the same direction. Each of the various positions of this axis is parallel to all the others. At certain seasons of the year the north end of the axis points away from the sun; at such times the northern hemi-

sphere is having winter, while it is summer in the southern hemisphere. Six months afterward—when the earth has continued around to the other side of the sun—the seasons are reversed, and the northern hemisphere is having summer. According to astronomy, spring begins (in the north temperate zone) on March 21, when the earth's axis is at right angles to the direction of the sun, and the days and nights are equal throughout the world. At this time—which is called the vernal equinox—the sun's center crosses the equator. Spring ends in the north temperate zone on June 21, the summer solstice, when the sun appears to stop moving in its passage to the north of the equator. The vernal equinox or the beginning of spring occurs in the south temperate zone on September 23, and the summer solstice is December 21.

Summer begins in the north temperate zone on June 21 and ends at the autumnal equinox on September 23. During this season the sun is north of the equator, consequently shining with greater strength on this portion of the globe, and the days are much longer. During June in this zone, the amount of heat received by the earth in the daytime is larger than the amount lost at night through radiation; in July or August the two are made equal, and the highest temperature of the entire year is reached. In the southern temperate zone, the summer begins on December 21 and ends when the equinox occurs on March 21.

In the north temperate zone, autumn starts with the autumnal equinox on September 23, ending at the winter solstice on December 21, although in Great Britain this season allegedly comes and ends a month earlier. Autumn is sometimes known as fall—which is considered an American term referring to falling leaves. In the south temperate zone autumn begins on March 21 and is not over until June 21. A considerable amount of heat is

carried over into autumn, and the early part of this season is therefore warmer than early summer. Warm early autumn weather is called "Indian summer."

Winter begins in the north temperate zone at the time of the winter solstice, December 22—the shortest day in the year—and ends with the vernal equinox on or about March 21. Although the rays of the sun are most slanting on December 21, and have the least heating effect on the earth, the coldest weather does not usually occur until about six weeks later because some heat from the summer is still retained by the earth. In the early part of February the slowly increasing intensity of the sun's rays equalizes the losses from the earth, and the winter temperatures begin gradually to rise. Winter starts on June 21 in the south temperate zone, ending on September 23.

The greatest difference in summer and winter temperatures occurs in

those regions that are farthest from the equator. In the tropic zone, there is but little variation in temperature or the length of the days, and the seasons differ mainly in the amount of rainfall; summer and winter are designated as the rainy and the dry season. On the equator is the mouth of the Amazon River, where the average monthly temperature throughout the year varies less than three degrees. Yet nearly six times as much rain falls in March as in November, because in March the sun is directly overhead, and moisture precipitates when the rapidly rising currents of humid air are cooled. In higher altitudes the rainfall is less variable. India has but three seasons—a cool, dry season from October until March, a warm and dry season from March to June, and a hot, rainy season from June until the latter part of September. This is due to the prevailing winds, and the Himalaya Mountains (the highest in the world), which form a barrier across the northern boundary of India.

TIME

Standard Time is the system of time established by common usage or legislative action in any part of the world. In the British Isles, every timepiece is regulated exactly by the time of a government-operated clock at Greenwich Observatory. The United States is divided into four standard time zones—the Eastern, the Central, the Mountain, and the Pacific; these are slower than Greenwich time by five, six, seven, and eight hours respectively. This system first came into national use in this country in 1883, being made necessary by the great east and west railroads, but the limits of the differ-

ent zones were not fixed by law until 1918.

When the system of local time is used, it is 12 o'clock (noon) at any region where the sun is at its highest point in the sky, and shadows are cast in a line extending north and south. Since noon continues in a westerly direction with the sun, confusion would result if trains were operated by local time. Those parts of the world which are east of the British Isles have faster time than that of Greenwich; those located west of England have slower time.

Standard time signals are sent from

the United States Naval Observatory through a transmitting station at Annapolis and over wires to the localities that use this government service.

Daylight Saving Time was instituted by several nations, including England, Germany, and the United States, during the First World War. It is one hour earlier than Standard Time. The object is to save light and fuel by making more use of the sun. Following the First World War the practice was discontinued in America on a national scale but a number of cities retained Daylight Saving Time from April to September of each year. The entire nation went on Daylight Saving Time once again in the Second World War. Farmers are generally opposed to Daylight Saving Time because it does not take into account the rhythm of farm life.

Astronomical Time is the measurement of the rotation of the earth. Because of this rotation, the stars seem to cross the heavens from east to west, in the same way that the sun rises and sets. But the stars are at such a great distance from the earth, that the positions which they apparently occupy are not affected very much by the motion of the earth's journey around the sun. Their positions are usually reckoned from a point in the heavens called the vernal equinox; this is the point at which the sun crosses the equator. A sidereal day is the period of the earth's rotation when measured with respect to the vernal equinox. An apparent solar day is the period of the earth's rotation when measured with respect to the sun. On December 23 the longest solar day occurs, and is about 30 seconds longer than the average day. Mean solar time—which has been devised to overcome this difficulty—is the time generally used by everyone, and is sometimes behind or in advance of apparent solar time. The equation of time is the difference between these two kinds of solar time.

The solar day, as well as the calendar year and the calendar month, begin at midnight of December 31. A sidereal year is the interval of time in which the earth revolves once around the sun—365 days, 6 hours, 9 minutes and 9.6 seconds. The tropical year is the length of time between the sun's two consecutive return journeys to the vernal equinox, and lasts for 365 days, 5 hours, 48 minutes and 46 seconds. Sidereal time is the kind generally used by astronomers, because its greatest change from day to day is only about one hundredth of a second.

International Date Line

The International Date Line is an imaginary line extending irregularly north and south through the Pacific Ocean, and is the point at which the traveler must add or subtract a day from the calendar. On a journey westward across the Pacific, he must add a day (for example, by changing Monday the 17th to Tuesday the 18th); when traveling eastward, he is required to set the date back one day. Otherwise he will not be in accord with the local date when he returns to his starting place after making the trip around the world.

Geographically, a meridian is usually considered to be half of an imaginary circle on the surface of the earth between the North Pole and the South Pole. In 1884 at Washington, D.C., the International Meridian Conference designated as the prime meridian—from which time was to be computed—the meridian passing through Greenwich, in England. The meridian located 180 degrees from this prime meridian was established as the International Date Line. However, it became necessary to vary the line from 180 degrees in several places in order that islands of the same group could be included in the same day.

TABLE OF WORLD TIME DIFFERENCES

When it is 12 o'clock noon, United States Eastern Standard Time, the time is as follows in the list of cities below:

Alexandria	7:00 P.M.	Lisbon	5:00 P.M.
Amsterdam	5:20 P.M.	Liverpool	5:00 P.M.
Athens	7:00 P.M.	London	5:00 P.M.
Auckland	4:30 A.M.*	Madrid	5:00 P.M.
Bangkok	12:00 MID.	Manila	1:00 A.M.*
Belfast	5:00 P.M.	Mexico City	11:00 A.M.
Berlin	6:00 P.M.	Montevideo	1:30 P.M.
Bogota	12:03 P.M.	Montreal	12:00 NOON
Bombay	10:30 P.M.	Moscow	7:00 P.M.
Bremen	6:00 P.M.	Oslo	6:00 P.M.
Brussels	5:00 P.M.	Paris	5:00 P.M.
Budapest	6:00 P.M.	Rio de Janeiro	2:00 P.M.
Buenos Aires	1:00 P.M.	Rome	6:00 P.M.
Calcutta	10:53 P.M.	Santiago (Chile)	12:00 NOON
Cape Town	7:00 P.M.	Shanghai	1:00 A.M.*
Copenhagen	6:00 P.M.	Singapore	12:00 MID.
Danzig	6:00 P.M.	Stockholm	6:00 P.M.
Delhi	10:30 P.M.	Sydney (N. S. W.)	3:00 A.M.*
Dublin	5:00 P.M.	Teheran	8:00 P.M.
Geneva	6:00 P.M.	Vancouver	9:00 A.M.
Havana	12:00 NOON	Vienna	6:00 P.M.
Havre	5:00 P.M.	Warsaw	6:00 P.M.
Honolulu	6:30 A.M.	Winnipeg	11:00 A.M.
Hong Kong	1:00 A.M.*	Yokohama	2:00 A.M.*
Istanbul	7:00 P.M.	Zurich	6:00 P.M.
Leningrad	7:01 P.M.	Times marked * are in the morning of the following day.	
Lima	12:00 NOON		

TABLE OF U.S. STANDARD TIME DIFFERENCES

When it is 12 o'clock noon in New York City, the time is as follows in the following cities:

Atlanta, Ga.	12:00 NOON	New Orleans, La.	11:00 A.M.
Birmingham, Ala.	11:00 A.M.	Omaha, Neb.	11:00 A.M.
Boston, Mass.	12:00 NOON	Portland, Ore.	9:00 A.M.
Chicago, Ill.	11:00 A.M.	St. Paul, Minn.	11:00 A.M.
Cleveland, Ohio	12:00 NOON	Salt Lake City, Utah ...	10:00 A.M.
Dallas, Texas	11:00 A.M.	St. Louis, Mo.	11:00 A.M.
Denver, Col.	10:00 A.M.	San Francisco, Cal.	9:00 A.M.
Detroit, Mich.	12:00 NOON	Seattle, Wash.	9:00 A.M.
Los Angeles, Cal.	9:00 A.M.	Washington, D.C.	12:00 NOON

THE MODERN CALENDAR

The modern calendar is based on the one devised by Julius Caesar. He fixed the average length of the year at $365\frac{1}{4}$ days, as measured by the sun. Each year has 365 days, with every

fourth year a "leap year" of 366 days. This so-called Julian calendar was modified by Pope Gregory XIII to correct an error of a few minutes in each year.

TABLE OF DAYS BETWEEN DATES

In order to find the number of days between two dates from the following table, first find the number of the earlier date in the first column. Then look across on the same line under the proper month and note the number. By the same process find the later date and note the number given. Subtract the smaller from the larger and you have the number of days that have elapsed between the two dates. For example, assume you want to know how many days have elapsed between February 16 and June 22. Look first in the column of numbers for 16, then across to the February column. The number there is 47. Then look for 22 in the number column and across to June. The number there is 173. Subtract 47 from 173 and you find that 126 days have elapsed between the two dates. In the case of a leap year, add one day after February 28.

Day Mo.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1	32	60	91	121	152	182	213	244	274	305	335
2	2	33	61	92	122	153	183	214	245	275	306	336
3	3	34	62	93	123	154	184	215	246	276	307	337
4	4	35	63	94	124	155	185	216	247	277	308	338
5	5	36	64	95	125	156	186	217	248	278	309	339
6	6	37	65	96	126	157	187	218	249	279	310	340
7	7	38	66	97	127	158	188	219	250	280	311	341
8	8	39	67	98	128	159	189	220	251	281	312	342
9	9	40	68	99	129	160	190	221	252	282	313	343
10	10	41	69	100	130	161	191	222	253	283	314	344
11	11	42	70	101	131	162	192	223	254	284	315	345
12	12	43	71	102	132	163	193	224	255	285	316	346
13	13	44	72	103	133	164	194	225	256	286	317	347
14	14	45	73	104	134	165	195	226	257	287	318	348
15	15	46	74	105	135	166	196	227	258	288	319	349
16	16	47	75	106	136	167	197	228	259	289	320	350
17	17	48	76	107	137	168	198	229	260	290	321	351
18	18	49	77	108	138	169	199	230	261	291	322	352
19	19	50	78	109	139	170	200	231	262	292	323	353
20	20	51	79	110	140	171	201	232	263	293	324	354
21	21	52	80	111	141	172	202	233	264	294	325	355
22	22	53	81	112	142	173	203	234	265	295	326	356
23	23	54	82	113	143	174	204	235	266	296	327	357
24	24	55	83	114	144	175	205	236	267	297	328	358
25	25	56	84	115	145	176	206	237	268	298	329	359
26	26	57	85	116	146	177	207	238	269	299	330	360
27	27	58	86	117	147	178	208	239	270	300	331	361
28	28	59	87	118	148	179	209	240	271	301	332	362
29	29	...	88	119	149	180	210	241	272	302	333	363
30	30	...	89	120	150	181	211	242	273	303	334	364
31	31	...	90	...	151	...	212	243	...	304	...	365

PERPETUAL CALENDAR

With this calendar you may ascertain any day of the week for any given date from 1753, when the New Style calendar was introduced, to 1999.

To ascertain any day of the week, first look in the table for the year required. Look then to the right where, under the months, are figures which refer to the corresponding figures at

the head of the columns of days below. For example, to know on what day of the week September 10 was in the year 1915, look in the table of years for 1915. In a parallel line under September is the figure 3. Look then at the number 10, the date, in column 3 below. It will be seen that September 10, 1915 fell on a Friday.

RADIO AND TELEVISION

Radio

The first radio signal was transmitted by Guglielmo Marconi in 1895 when he sent a message across his father's estate in Italy. In 1901 he transmitted the letter *S* across the Atlantic, the first trans-oceanic radio communication. In 1907 Lee de Forest invented the vacuum tube, making possible the economical transmission of long distance messages.

The first American commercial broadcasting station was KDKA, Pittsburgh. The first radio network, the National Broadcasting Company, was organized in 1926. Since then three other major chains, the Columbia Broadcasting System, the Mutual Broadcasting System, and the American Broadcasting Company, have been organized. The sale of time by broadcasters in 1944 netted \$225,000,000. In that year there were an estimated 33,716,000 homes equipped with radio sets in the United States. The total number of sets in use was 60,000,000.

All stations in the United States are licensed by the Federal Communications Commission. Each station is assigned a wave length. A government receiving station in Grand Island, Nebraska, checks on all American stations to see that they remain within their assigned channels. Ordinary or "long wave" stations broadcast on a

band with wave lengths ranging from 30,000 to 10 meters. Short wave broadcasting is on a band of 10 meters and less. In addition to measuring a radio wave by its length, another measure used is the *frequency* of the wave. This refers to the number of cycles a second. Short waves have a frequency of 1,500 kilocycles and above; long waves have a frequency of 550 to 1,500 kilocycles. To produce a signal that can be received without static, the method of *frequency modulation* has recently been developed. Under this method the station keeps the strength of its waves constant, but varies their frequency.

Television

Television is a method of bringing a picture or scene through the air to a viewer at some distance away. The scene or picture to be transmitted is broken down into a series of fine dots, each of which is transmitted at its proper light value. The dots are then reassembled by the receiving machine in their proper relative intensities.

The first demonstration of television transmission was made by John Logie Baird in 1926. In 1944 a television network was organized with stations WNBT, New York, WPTZ, Philadelphia, and WRGB, Schenectady.

GREAT INVENTIONS

1450, Movable type, Gutenberg (German)

1608, Telescope, Lippershey (Dutch)

1643, Barometer, Torricelli (Italian)

1752, Lightning rod, Franklin (American)

1765, Steam engine, Watt (Scottish)

1786, Machine-cut nails, Reed (American)

1793, Cotton gin, Whitney (American)

1807, Steamboat, Fulton (American)

1815, Mine safety lamp, Davy (English)

- 1819, Stethoscope, Laennec (French)
- 1827, Friction matches, Walker (English)
- 1829, Steam locomotive, Stephenson (English)
- 1831, Dynamo-electric machine, Faraday (English)
- 1837, Telegraph, Morse (American)
- 1841, Screw propeller, Ericsson (Swedish)
- 1842, Ether as an anesthetic, Long (American)
- 1844, Vulcanized rubber, Goodyear (American)
- 1846, Sewing machine, Howe (American)
- 1851, Induction coil, Ruhmkorff (German)
- 1852, Power elevator, Otis (American)
- 1856, Steel, Bessemer (English)
- 1858, Atlantic cable, Field (American)
- 1866, Dynamite, Nobel (Swedish)
- 1868, Lawn mower, Hills (American)
- 1868, Typewriter, Sholes (American)
- 1869, Air brake, Westinghouse (American)
- 1876, Telephone, Bell (American)
- 1877, Microphone, Berliner (American)
- 1877, Phonograph, Edison (American)
- 1879, Electric lamp, Edison (American)
- 1879, Cash register, Ritty (American)
- 1884, Fountain pen, Waterman (American)
- 1885, Linotype, Mergenthaler (American)
- 1887, Electric motor, Tesla (American)
- 1888, Roll-film hand camera, Eastman and Walker (American)
- 1889, Rayon, de Chardonnet (French)
- 1892, Color photography, Ives (American)
- 1893, Diesel engine, Diesel (German)
- 1895, Photo-electric cell, Elster and Geitel (German)
- 1900, Submarine, Holland (American)
- 1903, Airplane, Wright brothers (American)
- 1905, Gyroscope stabilizer, Sperry (American)
- 1907, Radio vacuum tube, De Forest (American)
- 1907, Bakelite, Bakeland (Belgian-American)
- 1914, Military tank, Swinton (English)
- 1920, Autogyro, De la Cierva (American)
- 1925, Television, Baird (Scottish)
- 1937, Nylon, Carothers (American)
- 1945, Atomic bomb, American and British scientists

GREAT SCIENTIFIC DISCOVERIES

- 1540, Astronomical system, Copernicus (Polish)
- 1609, Planetary motion, Kepler (German)
- 1628, Circulation of the blood, Harvey (English)
- 1665, Laws of gravitation, Newton (English)
- 1774, Oxygen, Priestley (English)
- 1790, Quantitative chemistry, Lavoisier (French)
- 1796, Vaccination, Jenner (English)
- 1810, Atomic theory, Dalton (English)
- 1823, Liquefaction of gases, Faraday (English)
- 1851, Dynamic theory of heat, Kelvin (English)
- 1859, Origin of Species, Darwin (English)
- 1865, Antiseptic surgery, Lister (English)
- 1866, Laws of heredity, Mendel (Austrian)
- 1876, Germ theory, Pasteur (French)
- 1880, Typhoid bacillus, Koch (German)
- 1882, Hydrophobia bacillus, Pasteur (French)
- 1882, Tuberculosis bacillus, Koch (German)

1883, Diphtheria bacillus, Klebs (German)
 1892, Laws of alternating current, Steinmetz (American)
 1895, X-ray, Roentgen (German)
 1898, Radium, Curie (French)

1905, Theory of relativity, Einstein (German-American)
 1934, Heavy water, Urey (American)
 1939, Smashing of the nucleus of the atom, Hahn, Meitner, Frisch, Strassman (German)

NOBEL PRIZE WINNERS

In Chemistry

1901, Jacobus Hendricus van't Hoff, Dutch; 1902, Emil Fischer, German; 1903, Svante August Arrhenius, Swedish; 1904, William Ramsay, English; 1905, Adolf von Baeyer, German; 1906, Henri Moissan, French; 1907, Eduard Buchner, German; 1908, Ernest Rutherford, English; 1909, Wilhelm Ostwald, German; 1910, Otto Wallach, German.

1911, Marie Curie, French; 1912, Victor Grignard and Paul Sabatier, French; 1913, Alfred Werner, Swiss; 1914, Theodore William Richards, American; 1915, Richard Willstätter, German; 1918, Fritz Haber, German; 1920, Walther Nernst, German.

1921, Frederick Soddy, English; 1922, Francis William Aston, English; 1923, Fritz Pregl, Austrian; 1925, Richard Zsigmondy, German; 1926, Theodor Svedberg, Swedish; 1927, Heinrich Wieland, German; 1928, Adolf Windaus, German; 1929, Arthur Harden, English, and Hans von Euler-Chelpin, Swedish; 1930, Hans Fischer, German.

1931, Friedrich Bergius and Karl Bosch, German; 1932, Irving Langmuir, American; 1934, Harold Clayton Urey, American; 1935, Frederic and Irene Curie Joliot, French; 1936, Peter Joseph Wilhelm Debye, Dutch; 1937, Walter Norman Haworth, English, and Paul Karrer, Swiss; 1938, Richard Kuhn, German; 1939, Adolph Butenandt, German, and Leopold Ruzicka, Swiss; 1943, Georg Hevesy, Hungarian; 1945, Artturi Virtanen, Finnish.

In Physics

1901, Wilhelm Konrad Roentgen, German; 1902, Hendrik Antoon Lorentz and Pieter Zeeman, Dutch; 1903, Antoine Henri Becquerel and Pierre and Marie Curie, French; 1904, Lord John William Strutt Rayleigh, English; 1905, Philipp Lenard, German; 1906, Joseph J. Thomson, English; 1907, Albert Abraham Michelson, American; 1908, Gabriel Lippmann, French; 1909, Guglielmo Marconi, Italian, and Karl Ferdinand Braun, German; 1910, Johannes Diderik van der Waals, Dutch.

1911, Wilhelm Wien, German; 1912, Nils Gustaf Dalen, Swedish; 1913, Heike Kamerlingh-Onnes, Dutch; 1914, Max von Laue, German; 1915, William Henry Bragg and William Lawrence Bragg, English; 1917, Charles Glover Barkla, English; 1918, Max Planck, German; 1919, Johannes Stark, German; 1920, Charles Edouard Guillaume, Swiss.

1921, Albert Einstein, German; 1922, Niels Bohr, Danish; 1923, Robert Andrews Millikan, American; 1924, Karl Manne Georg Siegbahn, Swedish; 1925, James Franck and Gustav Hertz, German; 1926, Jean Baptiste Perrin, French; 1927, Arthur Compton, American, and Charles Thomson Rees Wilson, English; 1928, Owen Willans Richardson, English; 1929, Louis Victor de Broglie, French; 1930, Chandrasekhara Vinkata Raman, Indian.

1932, Werner Heisenberg, German; 1933, Paul Adrien Maurice Dirac, English, and Erwin Schrödinger, Aus-

trian; 1935, James Chadwick, English; 1936, Carl David Anderson, American, and Victor Franz Hess, Austrian; 1937, Clinton Joseph Davison, American, and George Paget Thomson, English; 1938, Enrico Fermi, Italian; 1939, Ernest Orlando Lawrence, American; 1943, Otto Stern, American; 1944, Isidor Isaac Rabi, American; 1945, Otto Hahn, German, and Wolfgang Pauli, Swiss.

In Medicine and Physiology

1901, Emil von Behring, German; 1902, Ronald Ross, English; 1903, Niels Ryberg Finsen, Danish; 1904, Ivan Petrovich Pavlov, Russian; 1905, Robert Koch, German; 1906, Camillo Golgi, Italian, and Santiago Ramon y Cajal, Spanish; 1907, Charles L.A. Leveran, French; 1908, Paul Ehrlich, German, and Elie Mechnikov, Russian; 1909, Emil Theodor Kocher, Swiss; 1910, Albrecht Kossel, German.

1911, Allvar Gullstrand, Swedish; 1912, Alexis Carrel, American; 1913, Charles Richet, French; 1914, Robert Barany, Austrian; 1919, Jules Bordet, Belgian; 1920, August Krogh, Danish.

1922, Archibald Vivian Hill, English, and Otto Meyerhof, German; 1923, Frederick Grant Banting, and John James Richard MacLeod, Canadian; 1924, Willem Einthoven, Dutch; 1926, Johannes Fibiger, Danish; 1927, Julius Wagner-Jauregg, Austrian; 1928, Charles Nicolle, French; 1929, Christiaan Eijkman, Dutch, and Frederick Gowland Hopkins, English; 1930, Karl Landsteiner, American.

1931, Otto Heinrich Warburg, German; 1932, Charles Scott Sherrington, and Edgar Douglas Adrian, English; 1933, Thomas Hunt Morgan, American; 1934, George Richards Minot, William Parry Murphy, and George Hoyt Whipple, American; 1935, Hans Spemann, German; 1936, Henry Hallett Dale, English, and Otto Loewi, Austrian; 1937, Albert von Szent-Gyorgyi, Hungarian; 1938, Cor-

neille Heymans, Belgian; 1939, Gerhard Domagk, German; 1943, Edward Adelbert Doisy, American, and Henrik Dam, Danish; 1944, Joseph Erlanger and Herbert S. Gasser, American; 1945, Alexander Fleming, English, Howard W. Florey, Australian, and Ernst B. Chain, German.

Normal Pulse

AGE	BEATS PER MINUTE
Newborn infants.....	103 to 140
First year.....	115 to 130
Second year.....	95 to 110
Third year.....	85 to 95
Seventh to fourteenth year	80 to 90
In adult age.....	70 to 75
In old age.....	60 to 75

Temperature

The household thermometer in common use in America is the Fahrenheit thermometer, divided into degrees such that water freezes at 32° and water boils at 212°. To avoid confusion with the Centigrade thermometer, used by scientists and generally in many countries, a capital F is used, thus: 32° F and 212° F. The following divisions are commonly made on Fahrenheit thermometers:

Zero	0°
Temperate	55°
Freezing	32°
Summer Heat	76°
Blood Heat	98°

On the Centigrade thermometer the freezing point of water is taken as 0°, and the boiling point 100°.

Weight of Organs of the Body

	Grams	Ounces	Per Cent of Body Weight
Brain	1,400	49	2.37
Heart	300	10	0.46
Lungs	1,175	41	2.0
Spleen	170	6	0.346
Liver	1,600	57	2.75
Kidneys	300	10.5	0.44
Adrenals	10	0.35	0.014
Muscles	30,000	1,050	43.09
Skeleton	11,500	400	15.35

THE CHEMICAL ELEMENTS

ELEMENT	Symbol	Atomic Number	Atomic Weight	ELEMENT	Symbol	Atomic Number	Atomic Weight
Actinium	Ac	89	229.?	Mercury	Hg	80	200.61
Alabamine ...	Ab	85	217.?	Molybdenum .	Mo	42	95.95
Aluminum ...	Al	13	26.97	Neodymium ..	Nd	60	144.27
Antimony	Sb	51	121.76	Neon	Ne	10	20.183
Argon	A	18	39.944	Nickel	Ni	28	58.69
Arsenic	As	33	74.91	Nitrogen	N	7	14.008
Barium	Ba	56	137.36	Osmium	Os	76	190.2
Beryllium	Be	4	9.02	Oxygen	O	8	16.0000
Bismuth	Bi	83	209.00	Palladium ...	Pd	46	106.7
Boron	B	5	10.82	Phosphorus ..	P	15	30.98
Bromine	Br	35	79.916	Platinum	Pt	78	195.23
Cadmium	Cd	48	112.41	Polonium	Po	84	210.?
Calcium	Ca	20	40.08	Potassium	K	19	39.096
Carbon	C	6	12.010	Praseodymium	Pr	59	140.92
Cerium	Ce	58	140.13	Protactinium .	Pa	91	231.
Cesium	Cs	55	132.91	Radium	Ra	88	226.05
Chlorine	Cl	17	35.457	Radon	Rn	86	222.
Chromium ...	Cr	24	52.01	Rhenium	Re	75	186.31
Cobalt	Co	27	58.94	Rhodium	Rh	45	102.91
Columbium ..	Cb	41	92.91	Rubidium	Rb	37	85.48
Copper	Cu	29	63.57	Ruthenium ...	Ru	44	101.7
Dysprosium ..	Dy	66	162.46	Samarium ...	Sm	62	150.43
Erbium	Er	68	167.2	Scandium	Sc	21	45.10
Europium	Eu	63	152.0	Selenium	Se	34	78.96
Fluorine	F	9	19.00	Silicon	Si	14	28.06
Gadolinium ..	Gd	64	156.9	Silver	Ag	47	107.880
Gallium	Ga	31	69.72	Sodium	Na	11	22.997
Germanium ..	Ge	32	72.60	Strontium	Sr	38	87.63
Gold	Au	79	197.2	Sulfur	S	16	32.06
Hafnium	Hf	72	178.6	Tantalum	Ta	73	180.88
Helium	He	2	4.003	Tellurium ...	Te	52	127.61
Holmium	Ho	67	164.94	Terbium	Tb	65	159.2
Hydrogen	H	1	1.0080	Thallium	Tl	81	204.39
Illinium	Il	61	146.?	Thorium	Th	90	232.12
Indium	In	49	114.76	Thulium	Tm	69	169.4
Iodine	I	53	126.92	Tin	Sn	50	118.70
Iridium	Ir	77	193.1	Titanium	Ti	22	47.90
Iron	Fe	26	55.85	Tungsten	W	74	183.92
Krypton	Kr	36	83.7	Uranium	U	92	238.07
Lanthanum ..	La	57	138.92	Vanadium ...	V	23	50.95
Lead	Pb	82	207.21	Virginium ...	Vi	87	224.?
Lithium	Li	3	6.940	Xenon	Xe	54	131.3
Lutecium	Lu	71	174.99	Ytterbium ...	Yb	70	173.04
Magnesium ..	Mg	12	24.32	Yttrium	Y	39	88.92
Manganese ..	Mn	25	54.93	Zinc	Zn	30	65.38
Masurium ...	Ma	43	98.?	Zirconium ...	Zr	40	91.22

SPORTS AND GAMES

SPORTS

Baseball

Baseball is known as America's national pastime. It is played by two teams of nine men each. Their positions are: pitcher, catcher, first baseman, second baseman, third baseman, shortstop, right fielder, center fielder, and left fielder. The game is played in nine innings, during which the teams alternate at bat and in the field. Each team remains at bat until it has made three *outs*. The winner of the game is decided on the basis of most runs.

The field consists of a diamond-shaped infield and an outfield. At each of the corners of the infield is a base, from which the game takes its name. The distance between each base is 90 feet. The distance from the pitcher's box, from which the pitcher hurls the ball, to home plate, where the batter stands, is 60 feet 6 inches. The game is played with a ball measuring 9 to 9¼ inches and weighing 5 to 5¼ ounces, and a bat, which may not be more than 42 inches in length. When in the field the players wear protective gloves.

Organized baseball is divided into major and minor leagues. The two major leagues are the American and National leagues. Among the minor leagues are the International League, the American Association, the Pacific Coast League, and the Southern League.

The major leagues play a season of 154 games, running from April to

September. Each team is scheduled to play the other seven teams in its league 22 times a season. In July of each year the best players of each league are chosen to form an all-star team, and the two leagues play an All-Star Game. The team winning the most games of the regular 154-game schedule is awarded a pennant, and the pennant winners play each other in a World Series.

Baseball Facts and Figures

Baseball is said to have first been played at Cooperstown, N.Y., in 1839 by teams organized by Abner Doubleday. The National Museum of Baseball is now located there, as well as Baseball's Hall of Fame, containing plaques of the game's immortals.

The major league home run record is held by George Herman (Babe) Ruth who hit 60 in 1927. Joe Di Maggio holds the record for hitting safely in the most consecutive games, 56. The modern record of most games won by a pitcher in one season is held by Jack Chesbro of the New York Yankees, who won 41 games in 1904.

The largest crowd ever to attend a baseball game, 84,041, packed the Yankee Stadium on May 30, 1938. The first recorded game where receipts were paid took place in 1858. The longest game in major league baseball was played between Brooklyn and Boston on May 1, 1920, the game ending in a 1-1 tie after 26 innings.

Major Leagues

AMERICAN LEAGUE

TEAM	HOME PLAYING FIELD	PENNANTS WON	WORLD SERIES WON
		(1904-45)	(1904-45)
New York Yankees	Yankee Stadium	14	10
Philadelphia Athletics	Shibe Park	8	5
Washington (D.C.) Senators	Griffith Stadium	3	1
Boston Red Sox	Fenway Park	5	4
Cleveland Indians	League Park	1	1
	Municipal Stadium		
Detroit Tigers	Briggs Stadium	7	1
St. Louis Browns	Sportsman's Park	1	0
Chicago White Sox	Comiskey Park	3	2

NATIONAL LEAGUE

New York Giants	Polo Grounds	13	4
Brooklyn Dodgers	Ebbets Field	3	0
Philadelphia Phils	Shibe Park	1	0
Boston Braves	National League Park	1	1
Pittsburgh Pirates	Forbes Field	3	2
Chicago Cubs	Wrigley Field	10	2
Cincinnati Reds	Crosley Field	3	2
St. Louis Cardinals	Sportsman's Park	8	5

John McGraw led the New York Giants to more pennants than any other major league manager, ten. Lou Gehrig played more consecutive games than any other player—2,130 games. The highest salary ever earned by a baseball player, \$80,000 a year, was paid to Babe Ruth in 1930 and 1931.

Football

Football is played by two teams of eleven men each on a field measuring 300 feet from goal line to goal line and 160 feet across. The positions of the players are: center, left and right guards, left and right tackles, left and right ends, quarterback, left and right halfbacks, and fullback. The ball is an inflated spheroid pigskin measuring 28 to 28½ inches in circumference and 21¼ to 21½ inches around at its widest part. The playing time is divided into two *halves* and each half

into two *quarters*. A quarter lasts 15 minutes. The primary object of the game is to carry the ball over the enemy's goal line. This play, known as a *touchdown*, scores 6 points. A goal after touchdown scores 1 point, a *field goal* 3 points. A *safety* counts for 2 points. Play is started by a *kickoff*. The team in possession of the ball has four *downs* in which to score ten yards. If it fails, possession passes to its opponent. If it succeeds, it is given another ten yards to make. Among the standard plays in football are the *line plunge*, *end run*, *forward pass*, and *lateral pass*.

Until recent years football was almost exclusively an amateur game, played by college teams in a season of from five to ten games, from late September until Thanksgiving Day. Professional football has come to the fore recently, the outstanding league being

the National Football League with teams in New York, Brooklyn, Boston, Philadelphia, Washington, D.C., Green Bay, Wis., Chicago, Detroit, Cleveland, and Pittsburgh. Although there is no official college football champion, leading teams are invited to play in post-season games on New Year's Day in various "bowls." They include the Rose Bowl in Pasadena, Calif., the Sugar Bowl in New Orleans, the Orange Bowl in Miami, Fla., the Sun Bowl in El Paso, Tex., the Cotton Bowl in Dallas, Texas, and the Oil Bowl in Houston, Tex. In addition there is an East-West game, with the teams composed of leading players from the two sections of the country.

Individual achievement in the game is recognized by election to one of the many mythical All-American teams chosen by sports writers and radio broadcasters. Some of the great players of the game have been Jim Thorpe, Harold (Red) Grange, Chris Cagle, Albie Booth, Bennie Friedman, Ken Strong, Ernie Nevers, George Gipp, Bronko Nogurski, and Sammy Baugh. Famous college coaches include Knute Rockne, Glenn (Pop) Warner, Walter Camp, Fielding Yost, Alonzo Stagg, Lou Little, Gil Dobie, Andy Kerr, and Fritz Krisler.

Basketball

Basketball is America's newest popular sport, having been invented in 1891 by Dr. James Naismith in Springfield, Mass. The game is played by two teams of five men each on a court, either indoor or outdoor, measuring between 60 and 94 feet long by between 35 feet and 50 feet wide. There are two halves of 20 minutes each. The positions of the players are: center, left and right forwards, and left and right guards. The ball used is an inflated leather sphere measuring 30 to 32 inches around. Points are scored by throwing the ball through bottomless baskets suspended 10 feet above the

floor at either end of the court. A basket made while the ball is in play counts two points, while a basket made from the foul line scores one point. Virtually every high school and college in the country has its basketball team. The game has found favor among women as well as men and some schools have women's basketball teams.

Boxing

Boxing as carried on today observes the rules established by the Marquis of Queensbury to prevent serious injury to the participants and to provide a code of conduct in the ring. According to present practice a victory may be scored through one of two means: a decision may be handed down by the judges of a bout, or a knockout, known as a KO, may be registered. There are, in turn, two kinds of knockouts. One is scored by felling an opponent so that he cannot rise from the floor of the ring within ten seconds as counted by the referee. The other is a technical knockout and is awarded by the referee when he judges that one of the boxers is so badly hurt that to continue might cause him serious injury.

Eight boxing classes, arranged by weight, are recognized in this country: flyweight, 112 pounds, bantamweight, 118 pounds, featherweight, 126 pounds, lightweight, 135 pounds, welterweight, 147 pounds, middleweight, 160 pounds, light-heavyweight, 175 pounds, heavyweight, over 175 pounds.

Modern Heavyweight Champions

John L. Sullivan (1882-92)
 James J. Corbett (1892-97)
 Robert Fitzsimmons (1897-99)
 James J. Jeffries (1899-1906)
 Tommy Burns (1906-08)
 Jack Johnson (1908-15)
 Jess Willard (1915-18)
 Jack Dempsey (1919-26)
 Gene Tunney (1926-28)

Max Schmeling (1930-31)
 Jack Sharkey (1932)
 Primo Carnera (1933)
 Max Baer (1934)
 James J. Braddock (1935-36)
 Joe Louis (1937-)

Well-known champions in other classes have been: Philadelphia Jack O'Brien, Battling Levinsky, Harry Greb, Paul Berlenbach, Tommy Loughran, Maxie Rosenbloom, and Billy Conn, light-heavyweights; Stanley Ketchel, Mike O'Dowd, and Mickey Walker, middleweights; Jack Britton, Joe Walcott, Jackie Fields, and Fred Cochrane, welterweights; and Joe Gans, Battling Nelson, Freddie Welsh, Bennie Leonard, Sammy Mandell, Tony Canzoneri, Barney Ross, and Henry Armstrong, lightweights.

Boxing Facts and Figures

Before entering the Army in 1942, Joe Louis, born Joseph Louis Barrow, earned over two and a quarter million dollars from boxing. Beginning in 1934, he fought 57 bouts, won all but one, and scored 49 knockouts. The last heavyweight championship bout fought with bare knuckles was between John L. Sullivan and Jake Kilrain in 1889 at Richbourg, Miss., and lasted 75 rounds. The championship bout between Jack Dempsey and Gene Tunney in Chicago in September, 1927, drew the largest gate receipts in the history of boxing, \$2,650,000. The old time fight-to-the-finish is prohibited by law in the United States.

Horse Racing

Horse racing, the "sport of kings," has found wide popularity in democratic America. In 1944, more than one and a quarter billion dollars was wagered at tracks in the 17 states where betting is legal. America's fondness for horse racing is not new, for history shows that it was popular even in colonial times. The Kentucky

Derby, America's most popular race, was begun in 1875. Other well-known races are the Preakness, the Belmont Stakes, the Futurity, and the Widener Stakes. The better-known race tracks include Belmont Park, Empire City, Saratoga, Aqueduct, and Jamaica in New York; Hialeah in Miami, Fla.; Havre de Grace, Pimlico, and Bowie in Maryland; Churchill Downs in Kentucky; and Santa Anita in California.

The most popular form of horse racing in America is flat racing. Other forms, like steeplechase and trotting races, are run, but do not attract the crowds the flat races do. The outstanding steeplechase is the Grand National and the foremost trotting race is the Hambletonian.

Races are designated as being of a certain length, usually expressed in furlongs (a furlong is one-eighth of a mile) and limited to horses of a certain age. The Kentucky Derby, for example, is 10 furlongs and is for three-year-olds. A horse's age is not measured by calendar years, but by his age on January 1st. Thus, if a horse is born on December 31st in one year he is classed as a one-year-old as of January 1st, the following day.

Some well-known American race horses have been Man o' War, Zev, Reigh Count, Seabiscuit, Gallant Fox, Twenty Grand, and Whirlaway. Gallant Fox earned more prize money in a single year than any other horse when he won \$308,275 in 1930.

Track and Field

Track and field sports are part of our heritage from the ancient Greeks, who cultivated them to develop beauty, proportion, and grace in the body. Events in the modern American track meet include the 100-, 220-, and 440-yard flat dashes, the half-mile, the mile, and two-mile runs, the 120-yard high hurdles, and the 220-yard low hurdles. Field events include the high jump, pole vault, hammer throw, dis-

Some Track and Field Records

EVENT	TIME OR DISTANCE	HOLDER
100-yard dash	9.4 sec.	Jesse Owens and Frank Wykoff
1,000 meters	2 min., 21.5 sec.	Gundar Haegg
1 mile	4 min., 2.6 sec.	A. Andersson
120-yard hurdles	13.7 sec.	Forrest G. Towns and Fred Wolcott
220-yard hurdles	22.5 sec.	Fred Wolcott
Running high jump	6 ft., 11 in.	Lester Steers
Pole vault	15 ft., 7¾ in.	Cornelius Warmerdam

cus throw, shot put, and javelin throw. Most intercollegiate and scholastic track and field meets are held under the auspices of the Amateur Athletic Union, which was organized in 1888 to raise the standard of amateur athletics and to prevent gambling and professionalism in amateur sports. Among the major track and field meets are the National Amateur Athletic Union Championships, the Millrose A.C. games, the Pennsylvania Relays, the Drake Relays, and the Intercollegiate Association of Amateur Athletes (I.C.-4-A.) games.

Other track and field stars of today and yesterday include Charlie Paddock, Ralph Metcalfe, Ray Barbuti, Paavo Nurmi, Glenn Cunningham, Joie Ray, Gregory Rice, Eddie Tolan, and Archie Hahn.

Olympic Games

The modern Olympic games were instituted in 1896 in Athens, and were based on the ancient Greek model. The Greeks held the games every fourth summer at Olympia in a period of universal peace in the Hellenic world. The first modern games included the traditional track and field events, boxing, and wrestling. Since 1896 more events have been added, such as cycling, swimming, shooting, fencing, rowing, polo, association football, and winter sports. The games are controlled by an International Olympic Committee, to which each competing

nation contributes one member. The games have been held in Athens (1896), Paris (1900), St. Louis (1904), London (1908), Stockholm (1912), Antwerp (1920), Paris (1924), Amsterdam (1928), Los Angeles (1932), and Berlin (1936). No games were held during either the First or Second World Wars.

No official method of scoring for the entire series of games has been adopted, but by giving three points for first place, two for second place, and one for third place, observers grant that the United States has won most of the Olympics.

Tennis

Modern tennis, introduced into America in 1874, is played on a lawn or hard-surface court measuring 78 feet long and 27 feet wide for singles and 36 feet wide for doubles. The net should be 3 feet high in the middle and 3½ feet high at the posts. Matches are usually made up of three or five sets. A set is terminated when one player or team has won six games, with the provision that he must win by at least two games. A game is terminated when one player or team scores five points, except that he must have a margin of at least two points. Special names are given to each of the five points. They are, in order, *love* (zero), *fifteen* or *fifth*, *thirty*, *forty*, and *game*. If the score is tied at thirty-all, the score is called *deuce*. Then the fol-

lowing point is termed an *advantage*. *Advantage-in* means the server's point, *advantage-out* the receiver's point.

National championship play is carried on on carefully kept lawns. Until recent years almost all organized competition was on an amateur basis, under the supervision of the United States Lawn Tennis Association. But in the Nineteen-thirties a number of leading amateurs joined the professional ranks and toured the country, playing in large indoor sports arenas. They drew large crowds and did much to bring skilled play to many thousands who had never seen first-rate matches before.

Championship play, however, is still confined to amateurs. The national championships are played in September of each year at Forest Hills, New York. Titles competed for are the men's national singles champion, women's national singles champion, men's doubles champions, women's doubles champions, and mixed doubles champions.

Some prominent tennis stars of past and present are William M. Johnston, William T. Tilden, Vincent Richards, René Lacoste, Henri Cochet, Jean Borotra, Ellsworth Vines, Fred Perry, Donald Budge, Helen Wills, Suzanne Lenglen, Helen Jacobs, and Alice Marble.

Competition in championship matches has often been international, with foreign stars coming to this country to compete, and our players going abroad to play. Although there are no official world championships, victory in the Davis Cup matches, which are played by teams representing various countries, is an unofficial sign of world superiority. The Davis Cup matches were suspended at the outbreak of the Second World War.

Table Tennis

Table tennis or ping pong, an indoor adaptation of lawn tennis, is

played on a table measuring 5 feet by 9 feet. The rackets are made of wood and are surfaced with rubber, cork, or sandpaper so that the players may impart spin or twist to the ball. The ball is made of celluloid and weighs between $4\frac{1}{2}$ and $4\frac{3}{4}$ ounces.

Unlike lawn tennis, scoring is by numerical points. Twenty-one points usually wins, except that victory must be by at least 2 points. Players serve alternately after each 5 points. While the game was first introduced as a parlor pastime, it is now played as a highly skilled game. Regular tournaments are held, and title matches attract large numbers of fans.

Golf

Golf is a game played with specially constructed clubs and a small, gum-covered ball over an outdoor, grass-covered course of nine or eighteen holes. The origin of the game is traditionally ascribed to the Scotch, but there is good reason for believing that it was first played in Holland. It became popular in the United States in the 1880's.

The object of the game is to drive the ball from hole to hole in as few strokes as possible. The standard eighteen-hole course measures about 6,000 yards around, with the distance between holes varying from 100 to 650 yards. Each hole should theoretically be played in *par*. Par for a hole of 250 yards or less is usually 3 strokes and for longer holes proportionately more. The ball is driven from a small mound called a *tee*. Surrounding each hole is an area called a *green* and between the tee of one hole and the green of the next is the *fairway*. Bordering the fairway there may be trees or tall grass, called *rough*, and containing natural or artificial obstacles such as water, sand pits, or mounds. The basic golf clubs are the *driver*, the *putter*, the *brassy*, the *spoon*, the *mashie*, and the *niblick*. The game may be played

by two persons, each of whom hits his own ball, or by two pairs of two players each, called a *foursome*, who should play only two balls. Scoring may follow either one of two methods. In *match* play the number of holes won from the opponent, regardless of total strokes, determines the winner. In *medal* play the player or team having the lesser number of total strokes wins.

In America golf is both an amateur and a professional sport, although, except in a few tournaments, amateurs and professionals may not compete against each other. A national amateur champion and a professional champion are chosen each year, as is a national open champion in a tournament open to amateurs and professionals. There is also a national amateur title for women. Outstanding players have been Bobbie Jones, the only man to hold the American amateur and open titles and the British amateur and open titles simultaneously, Walter Hagen, Gene Sarazen, Johnny Farrell, Olin Dutra, Byron Nelson, Glenna Collett, Helen Hicks, Virginia Van Wic, and Patty Berg.

Ice Hockey

Ice hockey, Canada's contribution to major American sports, is played by two teams of six players each on a frozen playing area measuring 200 feet by 85 feet. The players are: center, left and right forwards, left and right defenses, and goalie. The goal is an upright net set in 10 to 15 feet from the end of the rink. The object of the game is to manipulate the *puck*, a hard rubber disk, along the ice with a hockey stick and shoot the puck into the opponent's goal. The game is divided into 3 periods of 20 minutes each.

Hockey is played by schools and colleges and other amateur groups; professional hockey is also popular in the United States. The leading league is the National Hockey League, with

teams in New York, Boston, Detroit, Chicago, Montreal, and Toronto. The winner of the league's playoffs is awarded the Stanley Cup.

Polo

Polo, a game played by riders on horseback, was introduced into the United States in 1876 as a result of the efforts of James Gordon Bennett, the American journalist. The game is played on a field 150 to 200 yards wide and about 300 yards long. When played outdoors, each team consists of 4 men (2 forwards and 2 backs); when played indoors teams usually have 3 men each. The object of the game is to drive a 3-inch white wooden ball between the opponent's goal posts by means of a long, flexible-handled mallet. The game is divided into 8 *chukkers* of 7½ or 8 minutes each. International polo tournaments were held at intervals from 1886 until 1939.

Tommy Hitchcock, Jr., is generally conceded to be the greatest polo player of all time. Other well-known players include Winston Guest, Eric Pedley, Cecil Smith, and Seymour H. Knox.

Bowling

Modern bowling, introduced into America by the Dutch, is played on a wooden alley 62 feet 10⅞ inches long and between 41 and 42 inches wide. There are ten pins, each measuring 15 inches high, arranged in a triangle, with the apex facing the bowler, at one end of the alley. The object is to knock the pins over with the bowling ball which may have a maximum circumference of 27 inches and a weight of between 10 and 16 pounds. Ten *frames* make up a game and the maximum, or perfect, score is 300. Each player is allowed a second roll in each frame if he has not knocked over all ten pins on his first roll. If he knocks over all the pins on his first try of the frame, he is credited with a *strike*,

for which he is given 10 points, and, as a bonus, the total pins he makes on his next two tries. If the bowler, having failed to knock over all ten pins on his first roll of a frame, succeeds on the second roll, he is credited with a *spare*, and is given 10 points, plus whatever he scores on the first roll of the next frame.

The popularity of bowling has increased greatly in recent years. It is estimated that there are between 7 and 16 million bowlers in the United States. Many of them are women. Annual championship matches are held under the auspices of the American Bowling Congress. Some famous bowlers are John Gengler, Joe Falcario, Tony Sparando, Ned Day, Mrs. Florence D. McCutcheon, Dorothy Barkopes, and Catherine Burling.

Billiards

Billiards is an indoor game played on an oblong, slate, cloth-covered table measuring 5 feet by 10 feet. A tapered, leather-tipped cue is used to manipulate the ivory balls. In the United States three types of billiards are played. *Balkline* billiards is played with 3 balls on a table with chalk lines marked at a specified distance from each cushion (usually 14 or 18 inches). The aim is to drive out one or two of the object balls from the resulting rectangles (except the center one) with the cue ball. In *three-cushion* billiards the object is to have the balls strike each other in specified ways. *Pocket* billiards is played with 15 balls, the object being to drive the balls into any of the 6 pockets.

Famous billiard players include Jake H. Shaefer, Willie Hoppe, Ralph Greenleaf, Erwin Rudolph, and Welker Cochrane.

Chess

Chess is one of the oldest games known to man. It is played on a board

divided into 64 squares, colored alternately light and dark. Each of the two players has 16 pieces made of wood, ivory, or composition material. There are 6 kinds of pieces: *king*, *queen*, *rook* or *castle*, *bishop*, *knight*, and *pawn*. The object of the game is to capture the opponent's king. At the start of play, each player's pieces are arranged in the two horizontal rows of squares nearest him. Each piece has a definite limit to its movements. The king may move only one square at a time in any direction. The queen may move diagonally, straight ahead, or straight backward as far as the route is clear. The rook may move along any straight line as far as the route is clear. The bishop may move diagonally as far as his path is clear, but is limited to the square of his color, that is, white or black. The knight moves 2 squares—one ahead and one diagonally. The pawn may move only forward, or away from the player; at its first move it may be set ahead one or two squares, after that only one square. When a piece moves to a square occupied by an enemy piece, it captures that piece. When the king cannot avoid being captured on the next move, he is *checkmated*.

To become thoroughly versed in chess requires much practice. Success depends on thorough study of the possibilities of movement, the ability to look ahead, and the ability to plan a series of movements. A number of standard tactics have been worked out by experts of the game. Championship matches are held regularly. Devotees of the game have formed numerous chess clubs, the most famous of which is probably the Marshall Chess Club, named for Frank Marshall who held the American championship for 26 years. Other famous players include Jose Capablanca, Reuben Fine, Paul Charles Morphey, Isaac Kashdan, Alexander Alekhine, and Samuel Reshevsky.

Checkers

Checkers, also known as draughts, is played on the same kind of board as is used in chess. Each of the two players has 12 red or black disks, called his *men*. They are placed on the first three rows of same-colored squares in front of each player. Movement is diagonal only, and the object of the game is to remove all of the

opponent's men. A man is removed when the opponent jumps over him to the square beyond. Once a man reaches the opponent's first row, he becomes a *king* and is crowned by having another piece placed on top of him. A king may move forward and backward.

Checkers is played by many people in the United States, but it has never received the attention that chess has.

CARD GAMES

Poker

Poker, the most popular gambling card game in the United States, may be played by from two to fourteen players. A standard deck of 52 cards is used. There are two basic types of poker. In *draw poker* each of the players receives a hand of five cards which none of the other players may see; bets are made on that hand, after which the players may discard from one to four cards, draw others, and bet on the revised hand. In *stud poker* each player receives one or more cards face down, with the remaining cards up to five dealt face up; bets are made after each face-up card is dealt.

There are eight card combinations in poker. They are, from the lowest to the highest:

ONE PAIR. Any two of a kind.

TWO PAIRS. Two cards of one kind and two of another.

THREE OF A KIND. Three cards of one kind.

STRAIGHT. Five cards in numerical sequence.

FLUSH. Five cards of the same suit.

FULL HOUSE. Three of a kind and a pair.

FOUR OF A KIND. Four cards of the same rank.

STRAIGHT FLUSH. Five consecutive cards of the same suit.

ROYAL FLUSH. A straight flush from the 10 to the Ace.

Rummy

The name *rummy* derives from the British word *rum*, meaning odd or queer. There are many variations of the game, such as gin rummy, Michigan or 500 rummy, Liverpool rummy, and Persian rummy. The game may be played by from two to six players in most forms.

The object of the game is to form the hand of from five to ten cards into certain groupings called *matched sets*. These sets may be three or four of a kind or three or more cards of the same suit in consecutive order.

After the cards are dealt to each of the players, the remainder, or *stock*, is set on the table face down, with the top card turned face up beside the stock. This card begins the discard pile. The player may draw from the stock or the discard pile, after which he discards one card from his hand to the discard pile.

Once a player has filled his hand with matched sets he may call "Rummy." The other players then must pay him double the total of their unmatched cards. Ace counts one point; ten and pictures, ten points; and other cards, their face value.

In some forms of play, a player may *knock* before he has a completely matched hand. This means that he may call a halt to the game on the assumption that the total of his unmatched cards is less than the unmatched total of his opponents. If he is correct in this assumption, he receives the difference between his unmatched total and those of his opponents. If, however, one of the opponents ties or beats the knocker, the points go to that opponent.

In some of the variations of the game, each matched set is laid on the table and other players are free to build upon it. For example, should a player see a set of three 6's on the table, he may add the fourth 6 and receive credit for that card.

Skillful play in all rummy games depends on remembering the cards that have gone into the discard, knowing when to get rid of high scoring cards, and being aware of the possibilities of forming matched sets.

Gin Rummy

Gin rummy is one of the newest and most popular variations of the game of rummy. Play is limited basically to two players. When three play, one must sit out a hand, and when four play, two games are played that are independent in every respect except the scoring.

Each player receives ten cards. Play proceeds according to standard rummy procedure. A player may knock only

if he has 10 unmatched points or less. The ace counts one point. When a player has knocked, his opponent may lay out on the knocker's sets to reduce his unmatched total. Thus, if a knocker has a set of three Queens, the opponent may lay off on it his own Queen, thus reducing his own total by 10. A player scores *gin* when he is left with no unmatched cards in his hand. For this he receives 20 points in addition to the opponent's unmatched total.

Scoring in gin rummy is more intricate than in other rummy games. The player scoring 100 points wins the game. For winning he gets an extra 100 points. For every hand he has won, a player gets 20 points. If a player has won no hands in a game, his opponent gets an additional 100 points.

Vingt-et-un (Twenty-one)

A banker deals each player a card, face down. The players look at the cards and bet with the banker according to the value of the cards. They may then draw other cards until they approach as near to 21 as they wish or until they reach 21. Aces count as 1 or 11; pictures count as 10; other cards have their face value. If a player draws more than 21 he is ruled out and automatically loses his bet. When all players have drawn, the banker deals himself enough cards to make or approach 21. If he draws more than 21, he loses to the players who remain in the deal. If he draws 21, he triumphs over all players except those who may have drawn a natural (21 in two cards). If he stops before drawing 21, he must compare his total with the totals of the other players. He wins the bets of those who have drawn less than he, and loses to those who have drawn more.

CONTRACT BRIDGE TABLES

Contract bridge players will find the following tables useful for ready reference.

Table of Honor-Tricks

2 HONOR-TRICKS

Any A K or A K J
(A K Q=2+Honor-tricks)

1½ HONOR-TRICKS

Any A Q or A Q J
1 HONOR-TRICK

Any Ace
Any K Q
Any K J 10
(K Q J or A J x=1+Honor-trick)

½ HONOR-TRICK

Any K x
Any Q J x
K J x=½+Honor-trick)

Plus Values: A Singleton or a Void suit. Q x; J in K Q J, A J x or K J x. Any six honor cards when bidding 4-card suits and for Notrump. Two plus equal about ½ honor-trick. "x" means any low card.

Minimum Biddable Suits

Regular: 4 cards—Q J x x; 5 cards—Q x x x x. Rebiddable: K J x x x, Q J 9 x x or any 6-card suit.

Note: Q x x x, x x x x x or better may be bid when holding an otherwise powerful hand or when another biddable suit is held. Also in responding at the one level.

Minimum Trump Support

J 10 x, Q x x, x x x x. When partner has rebid suit: x x x or Q x or better.

Opening Suit Bids of One

2+Honor-trick with 6-card or longer major suit; 2½ Honor-tricks with 5-card or longer suit; or 3 Honor-tricks.

Blackwood Slam Convention

A player bids four Notrump whenever he wants special information for a Slam, regardless of how many Aces or Kings he himself holds. His partner must then bid:

5 Clubs with no Aces
5 Diamonds with 1 Ace
5 Hearts with 2 Aces
5 Spades with 3 Aces

CONTRACT BRIDGE SCORING

TRICK-SCORE	SUITS			
	♣	♦	♥	♠
Each trick over 6.....	20	20	30	30
NOTRUMP:				
First Trick, 40; Each Subsequent Trick				30
RUBBER PREMIUM:				
If made in 2 games				700
If made in 3 games				500
If unfinished, winner of one game				300
UNFINISHED GAME:				
Part score premium (if only one side has part score)				50

SLAMS:	NOT VULNERABLE	VULNERABLE
Little Slam	500	750
Grand Slam	1000	1500

OVERTRICKS:	NOT VULNERABLE	VULNERABLE
Undoubled, each	Trick Value	Trick Value
Doubled, each	100	200
Redoubled, each	200	400
Making Doubled or Redoubled Contract	50	50

HONORS (in One Hand):

Four, 100 points. Five, 150 points. Four Aces at Notrump, 150 points.

GAME

100 points constitute a game. Only the number of Tricks bid and made may be counted towards game. Tricks made over Contract count as Overtricks.

PENALTIES FOR UNDERTRICKS

	NOT VULNERABLE		VULNERABLE	
	Undoubled	Doubled	Undoubled	Doubled
First Undertrick	50	100	100	200
Each Subsequent Undertrick ..	50	200	100	300

AUCTION BRIDGE SCORING

TRICK-SCORE:	♣	♦	♥	♠	Notrump
Each trick over 6	6	7	8	9	10
If doubled, multiply above values by 2.					
If redoubled, multiply above values by 4.					

GAME: Is won by the side that first scores 30 or more trick points.

RUBBER: 2 games of 30 points or more 250

SLAMS: Little Slam 50 Grand Slam 100

HONOR PREMIUMS:	♣	♦	♥	♠	Notrump
3 Honors	30	30	30	30	30
4 Honors divided between two hands	40	40	40	40	40
5 Honors divided between two hands	50	50	50	50	
4 Honors in one hand	80	80	80	80	100
5 Honors, 4 in one hand, 5th in partner's.	90	90	90	90	
5 Honors in one hand	100	100	100	100	

BONUSES: Fulfilling doubled contract 50
 Each trick above contract, if doubled 50
 Redoubled—doubles these bonuses.

PENALTIES: Each trick below declaration 50
 Each trick below declaration, doubled 100
 Each trick below declaration, redoubled 200

MISCELLANEOUS INFORMATION

MODERN SOCIAL DOCTRINES

AMERICANISM. Attachment and loyalty to the traditions, interests, and ideals of the United States of America. In 1917, at the time of the entrance of the United States into the First World War, a prize contest was held with the object of framing the best definition of Americanism. The prize winner was William Tyler Page, descendant of a signer of the Declaration of Independence. His avowal, "The American's Creed," was adopted and promulgated by the U.S. Government's Committee on Publication, and was accepted by the House of Representatives in behalf of the American people. It is as follows:

"I believe in the United States of America as a Government of the people, by the people, for the people; whose just powers are derived from the consent of the governed; a democracy in a republic; a sovereign Nation of many sovereign States; a perfect Union, one and inseparable; established under those principles of freedom, equality, justice, and humanity for which American patriots sacrificed their lives and fortunes.

"I therefore believe it is my duty to my country to love it; to support its Constitution; to obey its laws; to respect its flag, and to defend it against all enemies."

ANARCHISM. The word *anarchism* is derived from two Greek words mean-

ing "without government." On the one hand, it encourages terroristic resistance to all government; on the other, it looks forward to a time when men will outgrow coercive government. There have been two schools of anarchism in our time—individualist and communist. The first found a spokesman in Benjamin R. Tucker (1854-1939), an American. The second was represented by Prince Peter Kropotkin (1842-1921), a Russian.

BOLSHEVISM. The word *bolshevism* is derived from the Russian *bolshinstvo*, meaning majority, and came into being at the 1903 congress of the Russian Social Democratic Labor party in London, when Nicolai Lenin's views on the social revolution and his advocacy of a centralized party discipline clashed with the doctrines of a group which was known as the Mensheviks (from *menshinstvo*, or minority). Bolshevism is the name given to the type of socialism preached and practiced by Lenin and is generally used today as a synonym for communism.

CAPITALISM. The economic system in which capital under private control plays the principal part. Specifically, it is the system under which goods are produced, distributed, and exchanged in most civilized countries today. Competition is its lifeblood, and Adam Smith expressed its essential spirit when he said that every man, so long

as he does not violate the laws of justice, should be "left perfectly free to pursue his own interest in his own way, and to bring both his interest and his capital into competition with those of any other man, or order of men." The modern prevalence of capitalism dates from the industrial revolution of the late 18th and early 19th centuries, when the factory system finally displaced the feudal system in western Europe.

The term *State Capitalism* is often applied to the growing tendency on the part of governments to assume capitalistic functions. Governmental activities now include not only the organization of public works but also the ownership and control of banking and insurance, of transport and communication, and of certain natural resources.

COMMUNISM. Implies a social arrangement in which goods are produced and consumed in common. It is the opposite of a system based on private property. Many primitive tribes, religious establishments, and cooperative settlements throughout the world have practiced communism. As a political movement the doctrines of communism were given expression in Marx's and Engels' *Communist Manifesto* in 1848. This manifesto identified communism with the cause of the wage-working class, and looked to the socialization of the means of production to bring about not only increased total consumption and total production, and wider distribution, but also a radical reorganization of all the conditions of life.

The triumph of communistic principles in Russia as the result of the seizure of power by Lenin and his Bolshevik group in October, 1917, has made communism a world-wide issue.

COOPERATION. The name given to the activities of organized groups

which own and operate business enterprises for the mutual benefit of their members. The most successful of these activities is *consumers' cooperation*, which originated in the famous Toad Lane store of the Rochdale Pioneers in England in 1844. The principles on which consumers' cooperatives rest are comparatively simple. A member may join a society by buying one share or several shares, but has only one vote in the management of the society's business. He receives "dividends" not on capital invested, but in proportion to the amount of purchases made.

Three other types of cooperatives are:

Credit Unions, formed for the purpose of making short-term loans to their members at low rates,

Producers' Cooperatives, which operate by pooling the skills of workers and farmers,

Marketing Cooperatives, organized chiefly by farmers and ranchers who wish to eliminate middlemen and their profits.

In 1939 the total membership of the cooperative movement was estimated at approximately 130,000,000 persons, belonging to 300,000 cooperative societies of all types in 43 countries.

FASCISM. The political and economic system which prevailed in Italy under Benito Mussolini from 1919 to 1943, the year in which Mussolini was deposed and Italy surrendered in the Second World War. The fascists abolished party government and established in its place a "corporate state" under which private enterprise was encouraged but strictly regulated. The idea of the undisputed dictatorship of the state is the core of fascist doctrine. In the words of Mussolini, "Everything within the state, nothing outside the state, nothing against the state." The adjective fascist is now widely used to characterize followers not only of Italian Fascism but also of German

Nazism, because of the dictatorial powers of the state inherent in both systems.

IMPERIALISM. The practice of extending the domain and sovereignty of a nation, generally by force. It has both political and economic aspects, and often combines the two. *Political imperialism* aims at the consolidation of political units into an empire, such as the Roman Empire or the British Empire. *Economic imperialism* means the organization by an industrial nation of a group of consumer nations into a more or less monopolized market for its goods. Recent demonstrations of the imperialist spirit were Japan's invasion of Manchuria in 1931 and Fascist Italy's attempted seizure of Ethiopia in 1935.

INTERNATIONALISM. The effort to transcend national boundaries; it has found expression not only in the League of Nations and the United Nations Organization, but also in the various Internationals established by labor and socialist organizations.

LABOR UNIONISM. Labor unions are of two types—craft and industrial. Both favor collective bargaining with employers for the improvement of the workers' economic conditions and the use of the strike and boycott if negotiation fails. A craft union organizes its members in accordance with the kind of work that they do. Thus a carpenter of one employer joins a union of only carpenters working for other employers in a given locality. An industrial union includes all workers in a single plant or industry, regardless of the kind of work that each may be doing.

The American Federation of Labor is primarily committed to the principle of craft unionism. It was founded in 1881, and claims a membership of nearly 7,000,000.

The Congress of Industrial Organi-

zations, advocate of industrial unionism, grew out of the Committee for Industrial Organization formed in 1935 by John L. Lewis, head of the United Mine Workers, and other labor leaders. It claims a membership of approximately 6,000,000.

NATIONALISM. Is often identified with patriotism. Tends to set national interests above all other interests. *Economic nationalism* endeavors to make a nation self-sufficient in the economic sense.

NATIONAL SOCIALISM (NAZISM). The body of political and economic doctrines put into effect by the National Socialist German Workers' party in 1933. It is linked with the name of its leader Adolf Hitler and embodies to some extent the principles outlined in his book, *Mein Kampf*. National Socialism is based on the theory that certain races are superior to others and that the German race is superior to all. Furthermore, it holds that democracy is unworkable and demoralizing to the individual. In place of a democratic state, with free elections, it offers a one-party system controlled by the National Socialist party. National Socialism, in the twelve years of its rule in Germany, favored rigid state regulation of private enterprise; glorified militarism; enrolled its boys and girls in Hitler Youth groups; suppressed independent journalism, art, literature, drama, and music; and compelled religious and educational institutions to promote its policies. The National Socialist pattern has been followed by some of the other dictator nations.

PACIFISM. An attitude of mind opposing the use of military force under all circumstances. It arises from the conviction that nothing can justify the horror and bloodshed of war. This conviction may be based on religious

scruples or political principles. If religious, pacifism, according to its advocates, results from obedience to the commandment, "Thou shalt not kill," and from observance of Christian morality. Pacifists claim that no real distinction can be made between offensive and defensive wars. They argue that if, instead of preparing for war, the nations inculcated the principles of peace, war would come to an end. A War Resisters' International exists with branches in many lands, and more than 15,000 men in the United States were officially classified as conscientious objectors after the Selective Service Act was passed in 1940.

SINGLE TAX. The proposition that public revenues be raised by a tax on land values. It shows how under present conditions an increase in land values is often a deterrent to general prosperity and may lead to the impoverishment of the masses. The Single Tax is associated with the name of Henry George. *Progress and Poverty*, the book in which he expounded the doctrine, was published in 1879. "The tax upon land values," he says, "is the most just and equal of all taxes. It falls only upon those who receive from society a peculiar and valuable benefit, and upon them in proportion to the benefit they receive. It is the taking by the community, for the use of the community, of that value which is the creation of the community." While the Single Tax program has never been completely adopted, the Single Tax idea has been potent in many countries.

SOCIAL CREDIT. The doctrine that the returns of industry are largely unearned increment and, along with all interest, belong to the community and should be returnable to consumers in dividends. This doctrine is explained in books by Major C. H. Douglas, a Scottish engineer living in London,

and inspired a political movement in the province of Alberta, Canada, in 1938.

SOCIALISM. Proposes the collective ownership of land and capital. This collective ownership generally implies ownership by a democratic state. The word socialism was first used by Robert Owen and his followers in England during the early 19th century. "Scientific socialism," in the sense in which Karl Marx used the term, dates from the publication of the *Communist Manifesto*.

There are several important types, or schools, of socialism:

Christian Socialism is chiefly identified with the group of English clergymen who in 1848 launched a movement designed to commit the church to a socialist program. The two best known of these clergymen were Charles Kingsley and Frederick Denison Maurice. In the United States, since the turn of the century, Christian Socialism has been espoused by such well-known clergymen as W. D. P. Bliss, Washington Gladden, Walter Rauschenbusch, John Haynes Holmes, and Reinhold Niebuhr.

Fabian Socialism dates from the year 1884, when a group of English intellectuals including Sidney and Beatrice Webb, Bernard Shaw, and Graham Wallas combined to spread the ideas of socialism by educational methods. H. G. Wells was at one time a member of the Fabian Society. The American counterpart of the society is the League for Industrial Democracy.

Guild Socialism appeared in England during the first decade of the 20th century, and is associated with the names of A. J. Penty, A. R. Orage, and G. D. H. Cole. This movement, like Syndicalism, represented a break-away from political methods of propagating socialism. For a while it was notably successful in the field of housing construction.

Marxian Socialism is the type which has left the deepest impress on the life of our time. It takes its pattern from the *Communist Manifesto*, from *Capital*, and from other writings of Karl Marx. The social philosophy of Marx was rooted in concepts of "surplus value," "class struggle," and "economic determinism." He decided the idea that socialist objectives could be reached by idealistic aspiration, and he summoned the working class to play a historic part in a social revolution which he regarded as inevitable. The victory of the Marxist party in Russia under the successive leadership of Lenin and Joseph Stalin has been one of the world-shaking events of modern times.

Marxian socialism is virtually synonymous with the modern communist movement. There are Marxian socialist parties in every important country in the world. From 1919 to 1943 the communist parties of the world were organized in the Third (Communist) International. In the United States outstanding Marxian socialists have been Earl Browder and William Z. Foster. Foreign Marxian socialists include Mao Tse-tung of China, George Dimitroff of Bulgaria, Josip Brozovich (Tito) of Yugoslavia, and Maurice Thorez of France.

Evolutionary Socialism seeks to achieve its aims by peaceful and political methods. Socialist premiers of a moderate type have headed the governments of several European countries in recent decades, and hundreds of socialists have served in legislative capacities during the same period. In the United States political socialism has existed for upward of 50 years. Socialist congressmen, socialist mayors, socialist legislators have been elected to office.

State Socialism is a term often applied to socialization imposed from above and lacking democratic sanction. Bismarckian reforms in the 1880s, in-

tended to offset the proposals of Marxian Socialists, were of this type.

SYNDICALISM. The name given to a militant trade-union movement which originated in France in 1902. The movement was closely allied with anarchism and aimed to bring about a social revolution by means of a "general strike" and absolute control by labor unions of the instruments of production. It found its American expression in the Industrial Workers of the World under the leadership of William D. Haywood. Syndicalist organizations were overwhelmed by the onset of the First World War.

TECHNOCRACY. A proposal to put engineers in control of the economic system. This proposal was foreshadowed in the writings of the American economist Thorstein Veblen (1857-1929), and led to a technocratic organization headed by Howard Scott.

UTOPIANISM. The word *utopia* is coined from the Greek and means literally "nowhere." Utopianism is a name that is often given to the tendency which induces an attempt to escape, in imagination at least, from the imperfections of everyday life into a world of ideal values. This tendency started in Plato's *Republic*, continued in Sir Thomas More's *Utopia*, and has found memorable expression in the modern fictional romances of Edward Bellamy and William Morris.

The word *utopian* is also applied to the efforts of social idealists to realize a better world than the ordinary. Robert Owen, Count Claude Henri Saint-Simon, and Charles Fourier have been outstanding among such idealists. Owen tried to establish an ideal community in New Lanark, Indiana, in 1823. Brook Farm in Massachusetts and the Oneida Community in New York State have been two of the scores of utopian settlements established in America during the 19th century.

COMMON GIVEN NAMES

NAMES OF MEN

A

- Aaron. (Hebrew) High mountain.
 Abel. (Hebrew) Breath; vanity.
 Abner. (Hebrew) My father is Ner.
 Abraham. (Hebrew) Father of a multitude.
 Abram. (Hebrew) Father of a height; exalted father.
 Adam. (Hebrew) Earth-man.
 Adolph. (Teutonic) Noble wolf; noble hero.
 Adrian. (Latin) Black.
 Alan. (Celtic or Medieval Latin) Harmony.
 Albert. (Teutonic) Illustrious through nobility; nobly bright.
 Alexander. (Greek) Helper or defender of men.
 Alexis. (Greek) Help.
 Alfred. (Anglo-Saxon or Teutonic) Elf in council; good counsellor.
 Alphonso. (Teutonic) Noble by birth; ready.
 Alvin. (Teutonic) Beloved by all; noble or friend.
 Ambrose. (Greek) Divine; immortal.
 Amos. (Hebrew) Borne by God; strong or courageous.
 Andrew. (Greek) Manly; strong.
 Anthony. (Latin) Praiseworthy; priceless.
 Archibald. (Teutonic) Nobly bold; holy prince.
 Arnold. (Teutonic) Strong as an eagle.
 Arthur. (Cymric) Bear man; valorous.
 Augustus. (Latin) Majestic; august.

B

- Basil. (Greek) Royal; kingly.
 Benedict. (Latin) Blessed.
 Benjamin. (Hebrew) Son of the right hand.

- Bernard. (Teutonic) Bold as a bear.
 Bertram. (Teutonic) Bright raven.
 Boris. (Slavonic) A fighter.
 Brian. Variation of Briant, a Gaelic name meaning "in a dignified position."
 Bruce. Derived from Bruys, the name of a town in Normandy.
 Bruno. (Teutonic) Brown.

C

- Calvin. A variation of Calvus, a Latin name meaning "bald."
 Carl. (Dutch and German) Strong.
 Casper. (Persian) A horseman.
 Cecil. (Latin) Dim-sighted; blind.
 Cedric. (Celtic) War chief.
 Charles. (Teutonic) Strong; manly.
 Chester. (Teutonic) Dweller in a city.
 Christian. (Greek) One who follows the teachings of Christ.
 Christopher. (Greek) Bearing Christ.
 Clarence. (Latin) Illustrious.
 Claude. (Latin) Lame.
 Clement. (Latin) Merciful; mild.
 Clifford. (Teutonic) Dweller beside the ford near the cliff.
 Conrad. (Teutonic) Giving wise or bold counsel; resolute.
 Cornelius. (Latin) Horn.
 Cyril. (Greek) Lordly.
 Cyrus. (Persian) Sun.

D

- Dan. (Hebrew) A judge.
 Daniel. (Hebrew) God is my judge; divine judge.
 David. (Hebrew) Beloved.
 Dennis. (French) From Dionysius, which means "belonging to Dionysus."
 Dexter. (Latin) Fortunate; on the right hand.

Dominic. (Latin) Belonging to the Lord.

Donald. (Celtic or Gaelic) World ruler; proud chief.

Douglas. (Celtic) Dweller beside the black water.

Duncan. (Gaelic) Brown warrior.

E

Earl. (Anglo-Saxon) Man; noble.

Edgar. (Anglo-Saxon) Protector of property.

Edmund. (Anglo-Saxon) Defender of property.

Edward. (Anglo-Saxon) Guardian of property.

Edwin. (Anglo-Saxon) Gainer of property.

Elias. (Hebrew) Jehovah is God.

Elmer. (Anglo-Saxon) Noble and famous.

Emil. (Greek) Mild.

Enoch. (Hebrew) Dedicated.

Eric. (Anglo-Saxon) Brave or powerful.

Ernest. (German) Earnest.

Ethan. (Hebrew) Strength; firmness.

Eugene. (Greek) Noble; well-born.

Eustace. (Greek) Strong; healthy.

Evan. (Celtic) Young warrior.

Ezekiel. (Hebrew) God makes strong; strength of God.

Ezra. (Hebrew) Help.

F

Felix. (Latin) Happy; prosperous.

Ferdinand. (Teutonic or German) Brave.

Floyd. Variation of Lloyd, a Celtic name meaning "grey."

Francis. (Teutonic) Free.

Franklin. (Middle English) A freeholder (holder of property) or free-man.

Frederick. (German or Teutonic) Peaceful ruler.

G

Gabriel. (Hebrew) Man of God.

Geoffrey. (Teutonic) God's peace, or peace with God.

George. (Greek) A husbandman; landholder.

Gerald. (Teutonic) Spear wielder.

Gerard. (Teutonic) Strong with the spear.

Gilbert. (German or Teutonic) Bright wish; yellow bright or famous.

Godfrey. (German or Teutonic) Peace of God; at peace with God.

Gregory. (Greek) Vigilant.

Guy. (French) Leader.

H

Hans. German form of John.

Harold. (Anglo-Saxon) Army leader; general or champion.

Harry. A variation of Henry.

Henry. (Teutonic) Chief of a house; ruler of an enclosure or private property.

Herbert. (Anglo-Saxon) Glory of the army; bright warrior.

Herman. (Teutonic) Warrior.

Hilary. (Latin) Merry; cheerful.

Hiram. (Phoenician) Most noble.

Homer. (Cumaean) Blind.

Horace. (Latin) Light of the sun.

Howard. (Teutonic) Hedge guard.

Hubert. (Teutonic) Bright in spirit.

Hugh or Hugo. (Teutonic) Mind; soul.

Humphrey. (Anglo-Saxon) Protector of the home.

I

Ira. (Hebrew) Watchful.

Isaac. (Hebrew) Laughter.

Isidore. (Greek) Gift of Isis; strong gift.

Israel. (Hebrew) Contender with God.

Ivan. Russian form of John.

J

Jacob. (Hebrew) Supplanter.

James. (Hebrew) Supplanter.

Jason. (Greek) Healer.

Jasper. (Persian) Treasure seeker.

Jeffrey. A variation of Geoffrey.

Jerome. (Greek) Bearing a holy name.

Jesse. (Hebrew) Wealth.

Joel. (Hebrew) The Lord is God.

John. (Hebrew) God is gracious; precious gift of God.

Jonathan. (Hebrew) God has given.

Josèph. (Hebrew) He shall add.

Joshua. (Hebrew) Jehovah is deliverance.

Julian. (Latin) Belonging to (or sprung from) Julius; soft-haired.

Julius. (Latin) Downy-bearded.

K

Karl. German form of Charles.

Kenneth. A variation of Canice, patron saint of Kilkenny, Scotland.

L

Lawrence or Laurence. (Latin) Crowned with laurel.

Lemuel. (Hebrew) Consecrated to God.

Leo or Leon. (Latin) Lion.

Leonard. (German) Brave or strong as a lion.

Lcopold. (Teutonic) Bold for the people.

Leroy. (Old French) Royal.

Leslie. (Teutonic) One who leases.

Lester. (Anglo-Saxon) Shining.

Lewis. A variation of Louis.

Lionel. (Latin or French) Young lion.

Louis. (Teutonic) Bold or famous warrior.

Lucius. (Latin) Light.

Luke. (Latin) Light.

Luther. (German) Illustrious warrior.

M

Mark or Marcus. (Latin) Hammer.

Martin. (Latin) Warlike.

Matthew. (Hebrew) Gift of Jehovah.

Maurice. (Latin) Dark in color; Moorish.

Maximilian. (Latin) The greatest Emilius.

Michael. (Hebrew) Who is like God?

Miles. (Greek) A warrior.

Mortimer. (Celtic) Dweller beside the still water.

Moses. (Hebrew) Servant of God; the rescued.

N

Napoleon. (Greek) Of the new city; lion from the forest.

Nathan. (Hebrew) Gift; given.

Nathaniel. (Hebrew) Gift of God.

Neil or Neal. (Gaelic) Brave.

Nicholas. (Greek) Victorious army; victory of the people.

Nigel. (Greek) Dark.

Noah. (Hebrew) Comfort; rest.

Noel. (Latin or French) Christmas.

Norman. (Scandinavian) A North-man.

O

Oliver. (Latin) An olive, emblematic of peace.

Oscar. (Celtic) Bounding warrior.

Oswald. (Anglo-Saxon) Power of God.

Otto. (Teutonic) A mountain.

Owen. (Celtic or Welsh) Lamb; young warrior.

P

Patrick. (Latin) Noble; patrician.

Paul. (Latin) Little.

Percival. (Greek) Polite; courteous.

Peter. (Greek) A rock.

Philip. (Greek) Lover of horses.

Phineas. (Hebrew) Mouth of brass.

Q

Quentin. (Latin) The fifth.

R

Ralph. (Teutonic or Latin) House wolf.

Raymond. (Teutonic) Wise protection.

Reginald. (Teutonic) Strong ruler.

Rcuben. (Hebrew) Behold, a son!

Rex. (Latin) King.

Richard. (Teutonic) Powerful.

Robert. (Teutonic) Bright in fame.

Roderick. (Teutonic) Rich in fame.

Roger. (Teutonic) Famous with the spear.

Roland. (Teutonic) Fame of the land.

Rollo. A form of Rudolph.

Roscoe. (Teutonic) Swift horse.

Roy. (Old French) King.
 Rudolph. (Teutonic or German)
 Famous wolf or hero.
 Rufus. (Latin) Red; red-haired.
 Rupert. (Teutonic) Bright in fame.

S

Samuel. (Hebrew) His name is God;
 asked of God.
 Sebastian. (Greek) Venerable.
 Seth. (Hebrew) Appointed.
 Sidney or Sydney. (Teutonic) Of St.
 Denys.
 Silas. (Latin) Living in a forest.
 Simon. (Hebrew) Obèdient.
 Solomon. (Hebrew) Peaceful.
 Stanley. (Teutonic) Of the stony lea.
 Stephen or Steven. (Greek) A crown.
 Sylvester or Silvester. (Latin) Rustic;
 bred in the country.

T

Terence. (Latin) Tender.
 Theodore. (Greek) Gift of God.
 Thomas. (Hebrew) A twin.

Timothy. (Greek) Honoring or fear-
 ing God.
 Titus. (Latin) Safe.
 Tobias. (Hebrew) The Lord is good.

U

Ulysses. (Greek) A hater.
 Urban. (Latin) Of the city; polite.

V

Valentine. (Latin) Healthy or strong;
 powerful.
 Victor. (Latin) Conqueror.
 Vincent. (Latin) Conquering.
 Virgil. (Latin) Flourishing.

W

Wallace. (Latin) A foreigner.
 Walter. (Teutonic or German) Rul-
 ing the host; powerful warrior.
 Warren. (Teutonic) A park.
 Wilbur. (Teutonic) Bright resolve.
 William. (Teutonic) Helmet of reso-
 lution; resolute helmet.

NAMES OF WOMEN

A

Abigail. (Hebrew) My father is joy.
 Ada. (Teutonic) Happy.
 Adela. (Greek) Not clear; vague or
 indistinct.
 Adelaide. (Teutonic) Of noble rank.
 Adeline or Adelina. (Teutonic) Of
 noble birth.
 Agatha. (Greek) Kind; good.
 Agnes. (Greek) Pure; chaste.
 Aileen. A variation of Eileen.
 Alberta. (Teutonic) Illustrious
 through nobility; nobly bright.
 Alexandra. (Greek) Helper or de-
 fender.
 Alice or Alicia. (Greek) Truth.
 Alma. (Latin) Cherishing; nourish-
 ing.
 Amanda. (Latin) Worthy of being
 loved.
 Amelia. (Teutonic) Industrious.

Amy. (Latin) Beloved.
 Angela, Anglina, or Angelica. (Greek)
 Angelic; lovely.
 Anita. A Spanish form of Anna.
 Anna, Ann, or Anne. (Hebrew) Grace.
 Antoinette. French form of Antonia.
 Antonia. (Latin) Praiseworthy; price-
 less.
 Arabella. (Teutonic) Eagle heroine.
 Arline. (Teutonic) A girl.
 Audrey. (Teutonic) Autocratic; ex-
 ercising absolute power or authority.

B

Barbara. (Greek) Strange; foreign.
 Beatrice. (Latin) She who makes
 happy; bringer of joy.
 Belinda. (Latin) Beautiful snake.
 Belle. (French) Beautiful.
 Berenice or Bernice. (Greek) Bring-
 ing victory.

Bertha. (Teutonic) Bright.
 Betty, Betsy, Bettina, Beth, or Bessie.
 Shortened forms of Elizabeth.
 Beulah. (Hebrew) Married.
 Blanche. (French) White.
 Bridget. (Irish) August; lofty.

C

Camilla. (Latin) A freeborn girl, especially one who attends a sacrifice.
 Carlotta. An Italian form of Charlotte.
 Carmen. A variation of the Latin name Carmia, which means "rosy."
 Carol. (Gaelic) Melody.
 Caroline. (Teutonic) Strong.
 Catharine or Catherine. (Greek) Pure.
 Cecilia, Cicely, or Celia. (Latin) Dim-sighted; blind.
 Celeste. (French) Heavenly.
 Charlotte. (French) Feminine of Charlot, a French form of Charles.
 Chloe. (Greek) Herb; young verdure.
 Christina or Christine. (Greek) Believer in Christ.
 Claire. French form of Clara.
 Clara, Clarice, or Clarissa. (Latin) Illustrious; bright.
 Claudette or Claudine. French forms of Claudia.
 Claudia. (Latin) Lame.
 Clementina or Clementine. (Latin) Merciful; mild.
 Constance. (Latin) Constancy; firmness.
 Cora. (Greek) Maiden.
 Cordelia. (Latin) Warm-hearted.
 Corinne. (French) From the Greek name Corinna, meaning "a maiden."
 Cornelia. (Latin) Horn.
 Cynthia. (Greek) Derived from Mount Cynthus, meaning "lofty."

D

Daphne. (Greek) Laurel.
 Deborah. (Hebrew) A bee.
 Delia. (Greek) Of Delos.
 Delilah. (Hebrew) Languishing; delicate.
 Diana. (Latin) Goddess.
 Dinah. (Hebrew) Judged.

Dolores. (Spanish) Sorrows.
 Dora or Doris. (Greek) Gift of God.
 Dorothy. (Greek) Gift of God.

E

Edith. (Anglo-Saxon) Happiness.
 Edna. (Hebrew) Rejuvenation; pleasure.
 Edwina. (Anglo-Saxon) Gainer of property.
 Eileen, Elaine, or Ellen. Variations of Helen.
 Eleanor or Elinor. Variations of Helen.
 Elizabeth or Eliza. (Hebrew) Consecrated to God; worshipper of God.
 Ella. (Teutonic) Gift of the elf.
 Eloise. A variation of Heloise.
 Elsa, Elsie. Shortened forms of Elizabeth.
 Elvira. (Latin) White.
 Emily, Emeline, or Emmeline. Variations of Emma.
 Emma. (German) Industrious; energetic.
 Enid. (Anglo-Saxon) The fair.
 Ernestine. (Teutonic) Token of the eagle.
 Estelle or Estella. (Latin) Star.
 Esther. (Persian) Star.
 Ethel. (Anglo-Saxon) Noble.
 Eugenia. (Greek) Noble; well-born.
 Eulalia. (Greek) Fair speech.
 Eunice. (Greek) Happy victory.
 Euphemia. (Greek) Of good report.
 Eva. A Latin form of Eve.
 Evangeline. (Greek) Bringing joyous news.
 Eve. (Hebrew) Life.
 Evelina, Eveline, or Evelyn. Variations of Eve.

F

Faith. (Teutonic) Unwavering trust or confidence.
 Felicia. (Latin) Happy.
 Fidelity. (Latin) Faithful.
 Flora. (Latin) Flowers.
 Florence. (Latin) Blooming or flourishing; prosperity.
 Frances. (Teutonic) Free.

Frederica. (German or Teutonic)
Peaceful ruler.
Frieda or Freda. (Greek) Peace.

G

Genevieve. (Celtic) White wave.
Georgia, Georgiana, or Georgina.
(Greek) Landholder.
Geraldine. (Teutonic) Spear wielder.
Gertrude. (Teutonic) Spear maiden.
Gilda. (Anglo-Saxon) Golden.
Gladys. A Welsh form of Claudia.
Gloria. (Latin) Glory.
Grace. (Latin) Favor or grace.
Greta. A shortened form of Margaret.
Gwendolen, Gwendoline, or Gwendolyn. (Celtic) White-browed.

H

Hannah. (Hebrew) Grace.
Harriet. (Teutonic) Mistress of the house.
Hazel. (Hebrew) Protected by God.
Helen or Helena. (Greek) Light.
Heloise. (Teutonic) Famous warrior.
Henrietta. (Teutonic) Ruler of an enclosure or private property.
Hester. A variation of Esther.
Hilda. (Anglo-Saxon) Battle maid.
Hildegarde. (Teutonic) Battle maid.
Hope. (Anglo-Saxon) Desire and expectation.
Honorina or Honora. (Latin) Honorable; noble.
Hortense. (French) From Hortensia, meaning "a female gardener."
Huldah. (Hebrew) A weasel.

I

Ida. (German or Teutonic) Like a goddess.
Imogene. (Greek) Beloved child.
Inez. Spanish form of Agnes.
Irene. (Greek) Peace.
Iris. (Greek) A rainbow.
Irma. (Teutonic) A maiden of high degree.
Isabel, Isabella, Isabelle. Variations of Elizabeth.
Isadora. (Greek) Gift of Isis; a fair gift.

J

Jacqueline. (French) Feminine of Jacques, the French form of Jacob.
Jane. A variation of Joan.
Janet. The diminutive of Jane.
Jean, Jeanne, Jeannette. French variations of Jane.
Jemima. (Hebrew) A dove.
Jennifer. (Celtic) White wave.
Jennie, Jenny. Variations of Jane.
Jessica. (Hebrew) Grace of God; wealth or riches.
Joan. (Hebrew) God is gracious.
Josephine. The feminine form of Joseph.
Joyce. A variation of the Latin name Jucunda, meaning "filled with joy."
Judith. (Hebrew) Praised.
Julia. (Latin) Soft-haired.
Juliet. A variation of Julia.
June. (Latin) Forever youthful.
Justine. A French form of the Latin name Justina, meaning "righteous, just."

K

Katharine, Katherine, or Kathryn. (Greek) Pure.
Kathleen. (Celtic) Lovely eyes.

L

Laura. (Latin) Laurel.
Leah. (Hebrew) Weary.
Leila. (Arabic) Dark as night.
Lena. A shortened form of Helena.
Lenore, Leonora, Leonore. Variations of Eleanor.
Leslie. (Teutonic) One who leases.
Letitia. (Latin) Joy or happiness.
Lilian, Lily. (Latin) Lily.
Lois. (Greek) Good or desirable.
Loretta. (Teutonic) Tiny learned one.
Louella, Luella. (Teutonic) A shrewd heroine of war.
Louisa, Louise. Feminine forms of Louis.
Lucia, Lucy. (Latin) Light.
Lucille. (French) A variation of Lucia.
Lydia. (Greek) A native of Lydia.

M

- Mabel. (Latin) My beautiful one.
 Madeline. A variation of Magdalene.
 Madge. A shortened form of Margaret or Margery.
 Magdalene. (Hebrew) Belonging to Magdala.
 Marcella, Marcia. (Latin) Hammer.
 Margaret. (Greek) A pearl.
 Margery, Margot, Marguerite, Marjorie. Variations of Margaret.
 Maria, Marie, Marion. Variations of Mary.
 Martha. (Hebrew) Becoming bitter or sad.
 Mary. (Hebrew) Bitter tears or bitter water.
 Matilda. (Teutonic) Mighty battle maid or heroine.
 Maud, Maude. Shortened forms of Magdalene.
 Maxine. (Latin) The greatest.
 May, Mac. Shortened forms of Mary.
 Mildred. (German) Mild threatener.
 Millicent. (Teutonic) Derived from Melicent, which means "strong worker."
 Minerva. (Latin) The Roman goddess of handicrafts, health, and politics.
 Miranda. (Latin) Admirable or estimable.
 Miriam. (Hebrew) Rebellion; exalted.
 Muric. (Greek) Fragrant.
 Myra. (Latin) Admirable one.
 Myrtle. (Greek) Token of victory.

N

- Nancy, Nannette. Variations of Anne.
 Naomi. (Hebrew) My sweetness.
 Natalie. The French form of Natalia, which means "Christmas child."
 Nell, Nellie. Variations of Ellen, Eleanor, or Helen.
 Nina. (Babylonian) Goddess of the ocean.
 Nora, Norah. Shortened forms of Leonora.
 Norma. (Latin) Coinciding with the pattern; the square.

O

- Olga. (Teutonic) Holy.
 Olive, Olivia. (Latin) An olive, the symbol of peace.

P

- Pamela. (Teutonic) Gift of the elf.
 Patience. (Latin) Calm endurance.
 Patricia. (Latin) Noble; patrician.
 Paula, Pauline. Feminine forms of Paul.
 Pearl. (Latin) A variation of "perula," a Latin word for pear.
 Peggy. A variation of Margaret.
 Penelope. (Greek) A weaver.
 Phoebe. (Greek) Shining.
 Phyllis. (Greek) A green bough.
 Polly. A diminutive of Mary.
 Priscilla. (Latin) Ancient.
 Prudence. (Latin) Discretion or caution.

R

- Rachel. (Hebrew) A female sheep.
 Rebecca. (Hebrew) A peacemaker; a snare or noose.
 Regina. (Latin) Queen.
 Rhoda. (Greek) A rose.
 Rita. Derived from Margherita, the Italian form of Margaret.
 Roberta. (Teutonic) Bright in fame.
 Rosa, Rose. (Latin) A rose.
 Rosalie, Rosalind, Rosamond. Variations of Rosa.
 Ruby. (Latin) A precious stone.
 Ruth. (Hebrew) Beauty.

S

- Sabina. (Latin) A Sabine woman.
 Sadie, Sally. Variations of Sarah.
 Salome. (Hebrew) Peace.
 Sara, Sarah. (Hebrew) A princess.
 Selma. (Celtic) Fair.
 Serena. (Latin) Tranquil or calm.
 Sheila. An Irish form of Cecilia.
 Shirley. (Teutonic) Dweller in the shire meadow.
 Sibyl. (Greek) A prophetess.
 Sophie. The French form of Sophia, which means "wisdom."

Stella. (Latin) A star.

Stephanic. (French) From the Greek name Stephana, which means "crown."

Susan, Susanna. (Hebrew) A lily.

Suzannc. A French form of Susan.

Sylvia. (Latin) Living in a forest.

T

Thelma. (Greek) A child that is nursed.

Theodora. (Greek) Gift of God.

Theresa. (Latin) Carrying cars of corn; a harvester.

Tilda, Tillic. Shortened forms of Matilda.

U

Una. (Latin) One.

Ursula. (Latin) A female bear.

V

Vera. (Latin) True.

Veronica. (Greek) True image.

Victoria. (Latin) Victory; triumph.

Viola, Violet. (Latin) A violet.

Virginia. (Latin) A maiden.

Vivian. (Latin) Animated or lively.

W

Wilhelmina. (Teutonic) Helmet of resolve; resolute helmet.

Winifred. (Teutonic) A friend of peace.

Y

Yvette. (Teutonic) Small ivy vine.

Yvonne. (Hebrew) Grace of the Lord.

Z

Zoe. (Greek) Life.

RULES OF PARLIAMENTARY PROCEDURE

The business of organizations operating under parliamentary procedure is conducted by means of *motions*. A motion is merely a proposal that the body take certain action or that it express itself on a certain topic. In order to make a motion a member secures recognition from the chairman of the meeting by rising. The chairman recognizes the member by announcing his name. The member then says, "I move that" or "I move to," followed by the motion proper. If the motion is long and complicated the member may be requested to present it in writing. Frequently the chairman will repeat the motion to make it clear to the members.

Before a motion can be considered it must be *seconded*, that is, approved by at least one other member. A member may signify his approval by saying, "I second the motion."

Once seconded, the motion may be discussed by the body. Following the discussion a vote is taken on the mo-

tion. Voting may be *viva voce*, that is, orally, by considering the "Aye's" and the "Nay's" as a group, or by *roll call*, which considers every member's vote individually.

However, before a vote, a motion may be amended or withdrawn. To amend a motion, a subsidiary motion, containing the gist of the change, is offered and voted on before the main motion is offered for a vote.

The position of chairman in the course of a discussion is important for it is he who regulates the flow of debate, recognizing speakers, declaring certain speakers out of order, and clarifying the motions under consideration. The chairman should rule out of order any amendment which has nothing to do with the original motion, which repeats ground already covered, or which conflicts with the aim of the organization.

Under parliamentary procedure certain kinds of motions take precedence over others and the chairman of

a meeting should be acquainted with the order of such precedence. The following motions take precedence over main motions and over one another in the order in which they are listed. Motions marked N.D. are not debatable; those marked $\frac{2}{3}$ require a two-thirds vote to pass.

1. To adjourn until a specified time. N.D.

2. To adjourn *sine die* (without a specified time set for reassembling). N.D.

3. To recess. N.D.

4. Question of privilege (A matter affecting one's rights as a member).

5. Call for orders of day (A request to take up business in proper order). N.D.

6. Point of order (A request to enforce the rules of the body promptly). N.D.

7. Appeal (A request to submit a ruling of the chairman to a vote of the body).

8. To raise an objection. N.D. $\frac{2}{3}$.

9. To read certain papers. N.D.

10. To divide a motion (To call for consideration of the parts of a motion separately). N.D.

11. To withdraw a motion. N.D.

12. To suspend the rules. N.D. $\frac{2}{3}$.

13. To lay on the table (To set aside for future consideration). N.D.

14. To call for the previous question (To request that the pending motion be put to a vote; usually called for when the original motion has been lost sight of in the confusion of debate). N.D. $\frac{2}{3}$.

15. To postpone to a definite time.

16. To refer to a committee.

17. To amend an amendment.

18. To amend a motion.

19. To postpone indefinitely.

MODERN ETIQUETTE

Introductions

When You Are the Introducer. Adults are usually introduced as Mr., Mrs., Miss, or by whatever title they may possess—such as Dr. or Colonel. Special care should be taken to pronounce each name distinctly. The following forms are acceptable: "Mr. White, Mr. Smith." "Miss Jackson, may I present Dr. Brown?" "Mrs. Jones, this is Lieutenant Gilbert." A member of one's own family is not introduced as Mr., Mrs., or Miss, except when one is presenting a married daughter; a wife introduces her husband as "my husband," and a husband presents his wife as "my wife." When introducing friends to one's parents, one may say: "Mother, this is Alice

Brown" or "Father, this is Mr. Smith."

It is in bad taste to use any of the following forms: "Mr. White, let me make you acquainted with Mr. Smith," "Mr. White, meet Mr. Smith," or "Mr. White, shake hands with Mr. Smith." One should never use the term "my friend" in making introductions, thereby implying that only one of the two persons is a friend.

When a woman is introduced to a man, the woman's name is always spoken first unless the man is particularly noted or distinguished. In presenting a young person to an older one, the latter's name is given first. On formal occasions the hostess introduces people to each other individually. When the gathering is informal and

small, it is permissible to present a newcomer to a group in the following manner: "Mr. White, Mr. Smith, Mr. Jackson, Dr. Jones," but if women are in the group, the introductions should be made individually.

When You Are Introduced. To acknowledge a formal introduction, one may say "How do you do?" or merely repeat the name of the person introduced. Frequently a more cordial acknowledgment is required, such as: "This is a great pleasure, Mrs. Brown" or "How do you do, Mr. Smith. I have been wanting to meet you for some time." The expressions "Pleased to meet you" or "Glad to meet you" are in poor taste.

Men shake hands when introduced to one another, but if a man is presented to a woman, he should take her hand only if it is offered. A man always rises upon being introduced. He bows slightly when presented to a woman or a group—lifting his hat if the introduction is made on the street; the old-fashioned, full bow is no longer customary. A woman need not rise when introduced unless she is a hostess, or is presented to an elderly person.

In taking leave of a woman to whom he has been introduced, a man does not say "I am very glad to have met you" unless she has already expressed the same pleasure. A young woman who has been presented to an older woman always waits for her to make the initial move at leaving, rises when she does so, and takes her hand only if it is offered. When one leaves a social gathering—such as a party or tea—it is not necessary to say good-by individually to each person to whom one has been introduced, but the guest always informs the host or hostess of his departure.

The Dinner Table

Taking Your Place. Women always enter the dining room first. One should

not sit down unless everyone else is also ready to dine; a man pulls back the chair for a woman who is to be seated near him. Except in certain instances when hot foods are provided, no one begins to eat until all have been served. The napkin should be partially unfolded, placed across the knees and used only to touch the mouth when necessary. Sitting in an erect (but not stiff) position, one should keep the feet firmly on the floor and the elbows off the table—the hands resting in the lap when they are not in use.

The Silverware. Among the foods for which the spoon is used are cereals, fruits, puddings, custards, jellies, soups, and boiled eggs. After stirring coffee or tea—quietly, the diner places the spoon on one side of the saucer and drinks from the cup. In taking soup, one should move the bowl of the spoon toward the far side of the dish, and sip the liquid noiselessly from the side of the spoon. The fork is now considered more correct than the spoon in eating ice cream, and at formal dinners a wide-tined ice cream fork is often used.

The knife is used only for cutting, while the fork is used to hold food under the knife or to convey food to the mouth. When cutting food, one should hold the fork in the left hand—the prongs pointing downward—and the knife in the right. The knife is always placed on the right side of the plate after the food has been cut. One should use the fork when cutting nearly all foods except meat and the lettuce in salad; for the latter, salad knives are used. Foods which are eaten with the fork include vegetables, meat, fish, oysters, frozen puddings, ices, salads, clams, pies, and cakes. When one has finished using both the knife and fork, one should lay them side by side on the dish.

When not in use, the butter-knife should always lie fully on the butter-plate. Bread or large rolls should be

broken into small pieces as desired, and each piece buttered separately. When it is desirable to use butter on foods such as potatoes, it must be placed on the side of the dish with the butter-knife, and spread with the larger knife.

Foods which do not require the use of a fork, spoon, or knife include radishes, olives, corn on the cob, celery, shrimps served in their shells, nuts, lobster claws, cookies, small cakes, candy, and such fruit as grapes, plums, oranges, apples, and peaches (when uncooked), and small pickles. If a finger bowl is provided when one has eaten food with the fingers, the finger tips (one hand at a time) should be dipped slightly into the water and dried on the napkin.

General Suggestions. When a guest has finished eating and is ready to rise, he does not fold or smooth out his napkin, but merely places it on the table.

A blunder made during a meal may be passed over without comment, unless the error has caused someone else inconvenience—in which case one should apologize not too profusely or too lightly. When an article is dropped, one should retrieve it only if by so doing he does not disturb his neighbor, or if no servants are present. The guest who breaks an object of value (such as a bowl or cup) should always replace it, sending the duplicate to the hostess a day or two afterward with a note of apology.

Because second helpings delay the progress of a meal, it is courteous to decline them except at small, informal dinners. At a large and fashionable dinner, a late arrival begins with the course which others are having, and does not apologize to the hostess until it is possible for him to speak with her alone.

Fishbones may be taken from the mouth with the fingers; but as a general rule, food taken on a fork or spoon

should be eaten without delay, and never ejected from the mouth. A spoon should be used to cut the seeds from fruit while the latter is in the dish.

The lips must always be closed while one is chewing, and only a small amount of food may be taken into the mouth at a time. Toothpicks are never used in the presence of others.

Conversation

The first requisite of cultured conversation is to make others feel at ease. It is not enough merely to use correct grammar and speak distinctly; the well-bred person is always tactful and considerate of the feelings of others, never interrupting when someone else is talking, or contradicting anyone directly. Strong arguments often result in ill feeling—especially if they concern such subjects as religion or politics—and should be avoided whenever possible.

Gossip and unkind remarks about others are poor substitutes for intelligent conversation, and people who talk continually about themselves and their own interests are very apt to bore their listeners. One should never apologize for someone else's mistakes, or make another person appear ridiculous. It is in bad taste to question anyone too persistently. The man or woman of refinement never monopolizes a conversation, or uses unusual words which are not likely to be understood by the listener. If one is better informed on a certain subject than are other people who are discussing it, he should discreetly contribute a fact now and then during the conversation, rather than to display his superior knowledge in a "know it all" manner.

In Public

On the Street. Consideration for others is the keynote of correct behavior in public. A man who meets a woman of his acquaintance on the street does not speak first unless she is

a relative or a close friend, and always lifts his hat and bows slightly in greeting. Young persons meeting in public generally greet one another at the same time. The first sign of recognition is made by a married woman when meeting an unmarried one for the first time after an introduction, and by a person who meets a younger acquaintance.

When a man is walking with a woman (or with two or more women), he should remain on the side nearer the street. He does not offer his arm to a woman except to help her in some way, such as guiding her across a busy thoroughfare, and always relieves her of any heavy bundles she may be carrying.

In Public Conveyances. A woman should enter a public conveyance first, but in leaving a bus, train, or trolley car, the man precedes the woman to help her down to the street. Although a man should usually give his seat to a woman if all other seats are occupied, an elderly man need not surrender his seat to a girl.

Consideration for the comfort of others in public conveyances is a basic rule of etiquette. In reading a newspaper in a crowded train or bus you should fold the paper so that it can be read without taking up more space than necessary. On wet days you should take care not to let your umbrella or hat drip onto your fellow passengers. It is inconsiderate to block entrances and exits of vehicles if there is room elsewhere in the vehicle. On entering a public conveyance you should have your fare ready so that you do not hold up the people behind you. It is advisable to cover a cough or a sneeze in a handkerchief.

In Stores and Other Public Places. When in a store, a person of refinement never handles articles that he does not contemplate buying. One should be courteous and helpful to salespeople, and not take up too much of their time. Restrictions such as "No

Smoking" signs in stores and all other public buildings should be observed.

A woman accompanying a man into a restaurant is always the first to express her choice of a table. After a waiter has led them to the table—the woman preceding her escort—the latter helps in removing her coat, and places her chair for her if the waiter neglects this duty. She tells her companion what she wishes to have, and he repeats her choices to the waiter, adding his own. Desserts are not ordered until the entrees and middle courses have been consumed. It is bad form to speak of prices to the waiter unless the check is incorrect, and any criticism of the service should not be made to him, but to the management.

A man always allows women to enter an elevator first and—unless he is unavoidably in their way—to leave it first. If he is in the presence of women in the elevator of a public building, or any elevator that is crowded, he need not remove his hat.

At a theater, a woman enters first—followed by her escort. The woman takes her seat first. Considerate people do not talk, rustle papers, or make any unnecessary noise during either a play or a motion picture.

Other Etiquette Hints

Simplicity is the keynote of the art of dressing smartly. A woman of good taste never wears too much jewelry, and a man should not wear any article of clothing that might be considered "loud." Evening clothes are worn at formal dinners or dances, and are also proper for the opera; it is customary for a woman to wear a hat at informal social occasions.

A man removes his hat not only when meeting a woman on the street, but also when he greets a clergyman, when the national anthem is played or the American flag is carried by, and when in the presence of death, or while a funeral is passing.

DICTIONARY OF DREAMS AND SUPERSTITIONS

The dictionaries of dreams and superstitions which are given in the following pages are not intended to serve as an authentic analysis of the meanings of either dreams or superstitions. They are merely offered as interesting folklore, as a convenient compendium of the interpretations given dreams and superstitions by many peoples.

DREAMS

A

Accident. To escape unharmed; victory over an enemy.
Aces of cards. Successful ventures.
Actor. Your plans may be upset.
Actress. Your wishes will be fulfilled.
Admiration. Reliable friends or a devoted sweetheart.
Airplane. If flying, lack of foresight.
Altar. Reminder of duties to God and your family.
Ammunition. Quarrels.
Angel. Freedom from harm and difficulties.
Anger. Temporary difficulties.
Ants. Progress and happiness.
Anxiety. Delayed plans.
Apples. Sweet apples indicate happiness; sour ones, trouble.
Argument. Loyal friendship.
Aunt. Financial gains.
Automobile. If not riding too fast, prosperity.

B

Baby. Worries and cares.
Baggage. Financial difficulties.
Badness. Worries and disappointing news.
Battle. Pain or disaster.
Bear. A strong and deceptive enemy.
Bed. An early marriage.
Bees. Business troubles.
Bells. If merry, they indicate good luck.

Bible. Reminder to follow wise advice.
Bird. If not singing, signifies trouble.
Black. Sorrow and illness.
Blindness. Approaching misfortune.
Blood. Someone else's blood signifies an evil act by a friend.
Blue. Tranquillity and good fortune.
Bones. Financial gains.
Book. If reading, you will become famous.
Box. When empty, it means unhappiness; when full, prosperity.
Brother. Aid from an unexpected source.

C

Cage. If empty, disappointment in love.
Calendar. Good fortune.
Camera. A change in occupation.
Casket. Great sadness.
Cat. Disloyal and deceitful acquaintances.
Cemetery. If you are with another person, a loved one will die.
Chain. Difficulties and entanglements.
Christmas. Contentment.
Church. Reminder not to become discouraged.
Clothes. If old, they mean poverty; if new, financial gains.
Cloud. Temporary discord.
Competitor. He is anxious to reach an agreement with you.
Concert. An unpleasant argument.

Cousin. Good luck in your love affairs.
 Cow. Favorable news.
 Crowd. An evil omen unless crowd is friendly.

D

Dagger. A bitter quarrel.
 Dance. Joy and merriment.
 Darkness. Many sorrows and cares.
 Daughter. Joy and contentment.
 Dcafness. A misunderstanding may cause trouble.
 Dcath. Happiness in future.
 Debts. Financial gains.
 Desert. A long and tiring journey.
 Diamond. Great mental strain.
 Divorce. Difficult enterprises.
 Dog. Help from a loyal friend.
 Door. When open, good luck; if closed, loss of friendship.
 Drowning. Your mode of living is unwise.
 Drunkenness. Losses, bitterness, and cares.
 Dwarf. Disappointment.
 Dying. Successful business deals.

E

Eagle. Victory over your opponents.
 Earthquake. Financial losses.
 Eating. If alone, you must not depend on others for aid.
 Eggs. Successful business enterprises.
 Elephant. An opportunity of great importance.
 Elevator. If going up, you will be honored; if descending, woes lie ahead.
 Enemy. If pleasant, he wishes to be a friend.
 Epidemic. Disaster or scandal.
 Explosion. An unforeseen event will alter your plans.

F

Face. If cheerful, it indicates joy; if gloomy, bitter disappointment.
 Failure. Success.
 Falling. Serious losses.
 Father. If he is not angry, good luck is indicated.

Feathers. Favorable news.
 Feet. If small, they indicate failure; if large, success.
 Filth. Disappointment and deceit.
 Fire. If small, elimination of an enemy; if large, misfortune.
 Fish. New undertakings in business.
 Flag. Favorable news; if at half-mast, death for a loved one.
 Flirting. Strained marital relations.
 Floating. Inability to make decisions.
 Flood. Good fortune.
 Flowers. If in season, success.
 Fog. Failure and confusion.
 Friend. Contentment.
 Fruit. Prosperity and health.
 Funeral. If your own, misfortune lies ahead.

G

Gambling. Unwise undertakings.
 Garden. Pleasure.
 Gate. Advancement in prestige and financial condition.
 Ghost. Reminder to be careful in all relationships.
 Giant. An obstacle difficult to overcome.
 Glass. Everyone knows your secret.
 Gold. Success in business ventures.
 Goose. You will encounter a stupid, foolish person.
 Gossip. Envious rivals plotting against you.
 Grandchild. Comfort and repose.
 Grave. To dig a grave means you will soon marry.
 Green. Peacefulness and rest.
 Gun. Quarrels and ill feeling.

H

Hair. If well-combed, indication of a good opportunity.
 Hands. If beautiful, difficulties; if ugly, sorrows.
 Hearse. Indicates death for an old or sick person.
 Heaven. Freedom from cares.
 Hell. Adversity, losses and misfortune.
 Hog. One indicates misbehavior; many, happiness and success.

Hole. Losses.
Home. Health and success.
Horse. Business advancement; if dead, sickness.
Hospital. Trouble and misfortune.
Hunchback. A respected friend has deceived you.
Hunger. A loved one will take a long journey.
Hymns. Prosperity.

I

Ice. Failures, hardships, and disappointment.
Idiot. Reminder not to interfere in the affairs of others.
Indian. You should not move to another town.
Injury. Escape from peril.
Insects. Disagreeable arguments.
Insult. A quarrel and misfortune.
Iron. Misunderstandings; marriage to a strong-willed person.
Itch. Something you do not know about is happening.

J

Jail. Alarm and misgivings.
Jealousy. Anxiety and changes in business.
Jewels. A favorable sign.
Joy. Money from a relative.
Jungle. Dangers lie ahead.

K

Keys. If keys are new, good opportunities are indicated.
Killing. Serious losses through carelessness.
King. Honors and respect.
Kissing. Success in love.
Kneeling. If praying, you will be consoled.
Knife. Enemies and slander.

L

Ladder. Climbing it means success; coming down it, disappointment.
Lamb. Tranquillity and peace.
Laughter. Sorrow and tears.

Legs. If healthy, progress; if weak, failure.
Letter. A pleasant surprise.
Lightning. Hidden facts about you will be revealed.
Lion. An unforeseen event of great importance.
Locks. Difficulties.
Lottery. Deceitful acquaintances.
Love. Contentment and success.
Luck. Misfortune.
Luxury. Financial losses and wretchedness.

M

Machines. Adverse conditions will be overcome.
Magic. Fraud and hypocrisy.
Map. Travel in distant countries.
Marine. News from a foreign land.
Medicine. To take it indicates sorrow; to give it, good fortune.
Mending. If poor, you will receive money.
Mirror. Betrayal by an acquaintance; if broken, it means ill luck.
Misfortune. Eventual success.
Money. Prosperity.
Monkey. A treacherous enemy whom you do not know.
Monster. Dire disaster.
Moon. If clear, it means success; if red, a horrible experience.
Mother. A very favorable omen.
Mud. Jealousy, gossip and distress.
Murder. A disagreeable experience.
Music. Happiness.

N

Naval officer. A trip will bring you financial gains.
Necklace. Marriage to a rich person.
Needles. Disagreements and hard work.
Nephew. Happiness.
Newspaper. Possible failure of your enterprise.
Niece. Favorable news.
Noise. A loved one will be involved in difficulties.

Nose. If well-shaped, it means success.
Nurse. Sickness.

O

Ocean. If calm, contentment; if rough, disturbances.
Operation. Restored health.
Opponent. Obstacles will be overcome.
Orchard. If in poor condition, serious losses.
Organ. A happy marriage.
Orgy. Scandal and disgrace.
Owl. Failure; if hooting, misery.

P

Package. Secret plans.
Pain. Unexpected benefits.
Palace. Good fortune.
Paper. If clean, happiness; if soiled, distress.
Pearls. Pleasure and riches.
Pictures. A plot against you.
Poison. Grave peril.
Policeman. Your fears are groundless.
Poverty. Financial gains.
Prison. Freedom and gaiety.
Puzzle. To solve it means success; failure to do so, trouble.

Q

Quarrel. Gossip or jealousy.
Queen. Attainment of ambitions.
Quicksand. Serious danger.

R

Rabbit. Lack of courage; if black, it foretells trouble.
Railroad. A long journey.
Rain. Delays and trouble for all men except farmers.
Rats. Difficulties caused by a scheming enemy.
Red. Usually, happiness or good news.
Restaurant. Pleasure unless you are eating alone.
Revolution. Imminent peril.
River. If clear, means good luck; if muddy, lawsuits and quarrels.
Robber. Losses and suffering.
Rock. Security.

Roof. Climbing on it foretells wealth; climbing down, poverty.
Rope. Early solution of a problem.
Rugs. Happiness if they are not black, green, or yellow.
Running. If trying to escape from a pursuer, you are in danger.

S

Sadness. Joy.
Safety. Approaching peril.
Sailing. If water is calm, prosperity; if rough, calamities.
Sand. Changing business conditions.
Scandal. An impending catastrophe.
School. Superficiality and unfavorable events.
Shadow. An ominous sign.
Ship. If not in distress, foretells a successful trip.
Sickness. Sorrow.
Sister. Courage inspired by your family.
Skeleton. Death of a loved one.
Smoke. If light, indecision; if thick, failure.
Snake. An unknown enemy plotting against you.
Snow. Suffering from cold.
Son. A favorable sign.
Song. If merry, foretells pleasure; if sad, illness or death.
Stairs. If climbing, you will gain success.
Stars. If bright, good fortune; if clouded, bad news.
Success. Reminder not to relax your efforts.
Suicide. Difficulties and grief.
Sun. If bright, happiness; if overcast, impending doom.
Swamp. Trouble and misery.
Swimming. If your head is above water, success.

T

Table. If in bad condition, arguments and losses.
Teaching. A friend will soon need your help.

Teeth. If clean, progress and health.
Telegram. An unforeseen business proposition.
Terror. Peril from an enemy.
Theater. Happiness.
Thunder. Foretells a trying situation.
Tiger. A vicious enemy.
Tornado. Impending disaster.
Train. If riding on it, you will never travel far.
Trees. Security and good fortune.
Turkey. Warning of instability and over-optimism.

U

Ugliness. Failure and grief.
Umbrella. Aid in solving a difficult problem.
Undressing. Good fortune.
Unfaithfulness. Loyalty.
University. Attainment of scholarly ambitions.

V

Vegetables. Prosperity and contentment.
Veins. If swollen, a violent rage.
Veteran. Your good traits are appreciated.

A

Amber. Prevents throat from getting sore.
Amethyst. Prevents drunkenness.
Ants. Stepping on them causes rain.
Apple. If stolen and eaten, causes illness.
Asafetida. If hung around a child's neck, it protects it from disease.
Automobile. Washing it brings rain.

B

Baptism. If a child cries when baptized, it will be healthy.
Bats. Get tangled in a woman's hair.

Visiting. Heavy financial obligations.
Voices. If disagreeable, unpleasantness; if cheerful, good news.
Volcano. Approaching disaster.

W

Walking. If fast, confusion and trouble.
Wall. A barrier between you and another person.
Wandering. Lack of concentration.
War. Quarrels and great difficulties.
Water. If clear, good fortune; if muddy, privation and suffering.
Wedding. If not your own, good news.
Weeping. Happiness.
Whale. An ocean voyage.
Whisky. If taken moderately, foretells pleasure.
Window. To peer through it indicates anxiety.
Wine. Joy and prosperity.
Wolf. Beware of sly and unscrupulous enemies.

Y

Yellow. Great sadness and trouble.

Z

Zoo. A variety of pleasures.

SUPERSTITIONS

Bears. Are shapeless when born.
Bed. Getting out on left side makes you irritable.
Bees. If counted, they will die.
Bird. Can be easily captured by pouring salt on its tail.
Birthday cake. Misfortune will result if candles are not blown out with one breath.
Birthmark. Caused by outside influences.
Blondes. Should not be trusted.
Bread. A woman who takes last piece on a dish will never marry.
Bride. Should not be seen by bridegroom for an hour before wedding.

Broom. Stepping over a broom results in bad luck.

C

Cards. To have better luck at cards, walk around table.

Cat. A black one crossing your path brings misfortune.

Caterpillar. To avoid sickness, spit when you see one.

Chair. To rock an empty chair brings bad luck.

Cigarettes. Three should not be lit from same match.

Clock. Stops when its owner dies.

Cricket. To kill one brings dire misfortune.

Cuckoos. Foretell rain by croaking.

D

Darning needle. An insect which can sew up ears or lips.

Deer. Each prong of antlers represents a year.

Disease. To fear a disease will make you contract it.

Dish. If broken at a party, bad luck will result.

Dog. Howling predicts death.

Door. Same one should be used in entering and leaving a house.

Dream. Will come true if told before you eat breakfast.

Drunkard. Is specially guarded by the Lord.

E

Ears. If they burn, you are being discussed.

Easter. Something new should always be worn on Easter.

Egg. If laid on Easter Sunday it will never decay.

Evil eye. Some evil persons can harm you by looking at you.

Eyebrows. If not separated, they indicate jealousy.

Eyelash. Will make a wish come true if blown from back of hand.

Eyes. If black, they denote a liar; if gray, a greedy person.

F

Feet. If large, they denote intelligence. **Fingernails.** White spots on them represent gifts.

Fire. Draws lightning.

Forehead. If high, it indicates intelligence.

Fork. If dropped, foretells a visit by a man.

Four-leaf clover. Brings good luck.

Freckles. Will vanish if washed with water from an old stump.

Friday. An unlucky day.

Frogs. When croaking, they foretell rain.

Funeral procession. If you count the cars, a loved one will die.

Furniture. If creaking, ghosts are present.

G

Garlic. Will improve your complexion.

Glove. If lost, bad luck will result.

Green. If green clothes are worn, a loved one will die.

Groundhog Day. (February 2.) Six weeks of foul weather if groundhog sees its shadow.

Gun. When formed by tea leaves in a cup, they foretell a quarrel.

H

Hair. If plucked from horse's tail and put in water, will become a snake.

Hands. If cold, they indicate a warm heart.

Hemorrhage. To stop it, put an axe beneath patient's bed.

Hoe. Will cause bad luck if taken into a house.

Hogs. If restless, they foretell a change in weather.

Hoopsnake. Can roll like a hoop.

Horsechestnut. If carried, good for rheumatism.

Hunchback. To touch one at a horse race will bring luck.

J

Jaw. A mole on right side foretells peril from fire or water.

Jinx. An evil spell, also called hoodoo.
Journey. After starting, never go back if you have forgotten something.
Jug. When formed by tea leaves, a sign of good health.

K

Keys. Three worn together bring love, riches and health.
Kiss. To kiss an injury will cure it.
Knife. If given to a friend, will make him an enemy.
Knock. When speaking of good luck, you should knock on wood.

L

Ladder. To walk under one brings misfortune.
Laughter. To laugh at another's misfortune brings you bad luck.
Left. Bad luck results if you take first step of day with left foot.
Leg. A mole on left leg denotes laziness.
Lie. Cross your fingers when telling a lie.
Lightning. Never strikes same place twice.
Looking back. Results in bad luck if you have just left someone.
Lyre. To wear a jeweled one brings good luck.

M

March. To live through March gives immunity from death until January.
Marriage. On Thursday, Friday, or Saturday will not bring happiness.
Mascots. Bring good luck to an athletic team.
Match. Picking up a burnt match brings financial gain.
Minister's sons. Become reckless and wicked.
Mirror. To break one brings seven years of bad luck.
Mistletoe. To stand under it brings happiness.
Moon. Insanity results from sleeping in moonlight.

Moonstone. To wear one brings good fortune.

N

Neck. A mole on side or back of neck foretells wealth.
News. No news is good news.
Nosebleed. Stops if a key is dropped down sufferer's back.

O

Oar. When formed by tea leaves, indicates a small worry.
Opal. Brings bad luck unless it is your birthstone.
Ostrich. Puts its head in sand to escape injury.
Owl. If hooting, foretells death of a relative.
Oysters. Should not be eaten during months that do not contain an R.

P

Palm. When itching, foretells financial gains.
Palmistry. Indicates future events.
Peacock feathers. Bring misfortune if brought into a house.
Pearls. If worn, will make you weep.
Penny. Carrying one that bears a leap year date brings good luck.
Phrenology. Bumps on head foretell future happenings.
Picture. To turn a picture toward wall causes bad luck.
Pin. If picked up, will bring good fortune.
Playing cards. Can foretell the future.
Pretty children. Will be ugly when grown.
Profits. Counting them repeatedly brings financial losses.

R

Rabbit's foot. If carried, will bring good luck.
Rain. During a wedding, foretells trouble.
Rainbow. At end of it is a pot filled with gold.

Rats. If they leave a ship, it will sink on next voyage.

Redbud tree. Has red blossoms because Judas hanged himself from one.

Red hair. Sign of a bad disposition.

Register. Bad luck results from closing hotel register after signing.

Rice. A bride will bear children if it is thrown after her.

Ring. Taking a ring from someone's finger will bring him misfortune.

Robin. To kill one brings bad luck.

Rocks. When formed by tea leaves, foretell difficulties.

S

St. Swithin's Day. (July 15th). Rain on this day means rain for forty days.

Salt. Prevents a quarrel if thrown over left shoulder.

Schoolbook. When dropped, it foretells bad luck at school.

Seven. A lucky number.

Shark. If it follows a ship, someone aboard will die.

Shoe. Left one should be taken off first.

Sickle. When formed by tea leaves, foretells disappointment.

Singing. Before breakfast, means tears before supper.

Sleep. A lizard will crawl in your mouth if you sleep out of doors.

Snake. Will not die before sundown.

Sneeze. Looking at sun will prevent a sneeze.

Snow. Will not melt soon if moon is waning.

Spider. If on a wedding gown, brings good fortune.

Squirrels. Foretell a severe winter if they gather many nuts.

Star. First one appearing at night can make a wish come true.

Study. Too much causes mind to grow feeble.

Sunflowers. Will keep suitors away.

Swallows. Foretell rain if they fly near ground.

Sweeping. After sundown, brings dire misfortune.

T

Table. To sit on one will prevent you from marrying.

Tau. A kind of cross worn to prevent skin diseases.

Tea leaves. Foretell future events.

Telephone wires. If singing, they indicate a change in weather.

Thirteen. Unlucky number.

Thunder. Makes milk or cream turn sour.

Timber. Should be felled only when moon is waning.

Toothpaste. Can destroy microbes.

Train. An omen of bad luck if it crosses a bridge above you.

Tree of life. A mystic diagram, foretelling future events.

Troubles. Never come singly.

Turtle. Your initials on its shell will prevent it from escaping.

Two-dollar bills. Bring misfortune when carried.

U

Ugly children. Will be good-looking when grown.

Umbrella. Bad luck results from opening one indoors.

V

Valentines. Bring good luck in love.

Vampires. May suck your blood while you sleep.

Venus. Can control destinies of human beings.

Violin. When formed by tea leaves, foretell a gay social occasion.

W

Warts. Rubbing with bacon or stolen dishrags will cure them.

Watching. A watched pot never boils.

Wedding cake. If placed beneath pillow, makes you dream of future events.

Wedding ring. If removed from your finger, brings bad luck.

Weeping willow. To plant one results in grief.

Whippoorwill. Foretells death if heard near a house.

Whistling. Bad luck results from whistling in a house.

Wishbone. Larger part of one can make a wish come true.

Witches. Cast evil spells, and fly on broomsticks at night.

Worms. When formed by tea leaves, foretell scandal.

Wrens. Bring good luck when nesting close to a dwelling.

Y

Yawning. Place hand over mouth to keep evil spirits from flying in.

Youth. Can be restored to old persons who bathe in Fountain of Youth.

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